MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-9902 Egapencil Black

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Pigment black	1333-86-4	7 - 13 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Pigment black 1333-86-4	TWA: 3.5 mg/m^3	TWA: 3.5 mg/m^3	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Black	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.02 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information	
Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Pigment black 1333-86-4	> 8000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Pigment Black		Group 2B		

IARC (International Agency for Research on Cancer)

Group 2AB - ***Probably carcinogenic to humans***

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pigment black 1333-86-4	72h EC50 > 10000 mg/l (Scenedesmus subspicatus)	96h LC50: > 1000 mg/L (Brachydanio rerio)	-	24h EC50 > 5600 mg/L
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see “Section 8. Exposure Controls/Personal Protection” of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contain Proposition 65 chemicals

Chemical Name	California Prop. 65
Pigment Black	Carcinogen (airborne, unbound (not bound within a matrix) and respirable size (10 micrometer or less in diameter))

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 9018-0024 Egapencil Clear Gloss New

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

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Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
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Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

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GHS Label elements , including precautionary statements

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Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
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Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
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Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
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Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	2 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage	Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles
Incompatible Products	Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters
Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3		

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Clear	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known

Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.00 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	10000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity
No specific test data related to reactivity available for this product or its ingredients

Chemical stability
Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions
None under normal processing

Conditions to avoid
Elevated temperatures and sources of ignition.

Incompatible materials
Oxidizing agents

Hazardous Decomposition Products
Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures
Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose Ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect No information available

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Reprodutive Toxicity No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability
No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging
If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes

Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4085-2075 Egapencil Gold

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Metallic aluminum	7429-90-5	5 – 10 %
Pigmen yellow 83	5567-15-7	1 – 5 %
2-methyl propan-1-ol	78-83-1	2 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice — Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact — Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact — Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation — Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion — Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider — Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician — Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage	Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters
Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Metallic aluminum 7429-90-5	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Gold	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known

Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.00 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity
No specific test data related to reactivity available for this product or its ingredients

Chemical stability
Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions
None under normal processing

Conditions to avoid
Elevated temperatures and sources of ignition.

Incompatible materials
Oxidizing agents

Hazardous Decomposition Products
Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures
Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Metallic aluminum 7429-90-5	5 g/kg (Rat)	-	-
Pigmen Yellow 83 5567-15-7	LD50 > 2.000 mg/kg (rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect No information available

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Reprodutive Toxicity No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By	PT. Ega Paintindo
Revision Date	-
Revision Note	-

General Disclaimer

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If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-4334 Egapencil P 032 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	5 – 10 %
Pigment red	2786-76-7	10 – 15 %
Fluorescent pink	n.a	5 – 10 %
Fluorescent orange	n.a	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup

Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.08 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment red 2786-76-7	2000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contain Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-6272 Egapencil P 347 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment yellow	5468-75-7	5 – 10 %
Pigment green	1328-53-6	10 – 20 %
Fluorescent green	n.a	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment yellow 5468-75-7	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known

Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.03 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment yellow 5468-75-7	> 5000 mg/kg (Rat)	-	-
Pigment green 1328-53-6	2000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Pigment green 1328-53-6	-	96h LC50: 5540 mg/L (Cyprinus carpio)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Chemical Name	Weight %	SARA 313 - Threshold Values %
Pigment green 1328-53-6	20-25	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-6271 Egapencil P 360 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment green	1328-53-6	1 – 5 %
Pigment yellow	5468-75-7	10– 20 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment yellow 5468-75-7	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.06 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment green 1328-53-6	2000 mg/kg (Rat)	-	-
Pigment yellow 5468-75-7	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pigment green 1328-53-6	-	96h LC50: 5540 mg/L (Cyprinus carpio)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see “Section 8. Exposure Controls/Personal Protection” of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Chemical Name	Weight %	SARA 313 - Threshold Values %
Pigment green 1328-53-6	20-25	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

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If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-0244 Egapencil P 473 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	20 – 30 %
Pigment red	2786-76-7	1 – 5 %
Iron oxide yellow	51274-00-1	5 – 10 %
Pigment orange	3520-72-7	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known

Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.20 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment red 2786-76-7	2000 mg/kg (Rat)	-	-
Pigment orange 3520-72-7	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-0417 Egapencil P 1905 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	20 – 30 %
Pigment red	2786-76-7	1 – 5 %
Fluorescent pink	n.a	1 – 5 %
Fluorescent orange	n.a	0.5 – 1 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup

Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.20 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment red 2786-76-7	2000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-3027 Egapencil P 2025 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	20 – 30 %
Pigment orange	3520-72-7	5 – 10 %
Pigment yellow	5468-75-7	1 – 5 %
Fluorescent orange	n.a	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment yellow 5468-75-7	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known

Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.10 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment orange 3520-72-7	> 5000 mg/kg (Rat)	-	-
Pigment yellow 5468-75-7	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)		24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

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If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-7008 Egapencil P 2945 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment blue	147-14-8	5 – 10 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice — Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact — Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact — Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation — Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion — Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider — Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician — Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage	Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles
Incompatible Products	Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment blue 147-14-8	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup

Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.05 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment blue 147-14-8	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)		24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
Pigment blue	6.60
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-7010 Egapencil P 2995 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment blue	57455-37-5	1 – 5 %
Fluorescent green	n.a	10 – 20 %
Fluorescent blue	n.a	1 – 5 %
Iron oxide yellow	51274-00-1	5 – 10 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment blue 57455-37-5	-	96h LC50 > 32000mg/kg	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known

Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.05 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment blue 57455-37-5	10 g/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Pigment blue 57455-37-5	-	96h LC50 > 32000mg/kg	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)		24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-5216 Egapencil P 7615 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Iron oxide red	1332-37-2	5 – 10 %
Pigment black	1333-86-4	1 – 5 %
Titanium dioxide	13463-67-7	20 – 30 %
Iron oxide yellow	51274-00-1	5 – 10 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron oxide red 1332-37-2	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Pigment black 1333-86-4	TWA: 3.5 mg/m^3	TWA: 3.5 mg/m^3	-
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.06 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information	
Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation

Skin Contact Causes skin irritation
Ingestion Harmful if swallowed
Long Term Effects No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron oxide red 1332-37-2	> 5000 mg/kg (Rat)	-	-
Pigment black 1333-86-4	> 8000 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Pigment Black		Group 2B		

IARC (International Agency for Research on Cancer)
Group 2AB - ***Probably carcinogenic to humans***

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Iron oxide red 1332-37-2	-	96h LC50: > 1000 mg/L (Leuciscus idus)	-	-
Pigment black 1333-86-4	72h EC50 > 10000 mg/l (Scenedesmus subspicatus)	96h LC50: > 1000 mg/L (Brachydanio rerio)	-	24h EC50 > 5600 mg/L

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)		24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid

UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contain Proposition 65 chemicals

Chemical Name	California Prop. 65
Pigment Black	Carcinogen (airborne, unbound (not bound within a matrix) and respirable size (10 micrometer or less in diameter))

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

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If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 9023-2081 Egapencil Primer Woodcolor New

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Iron oxide red	1332-37-2	1 – 5 %
Iron oxide yellow	51274-00-1	1 – 5 %
Titanium dioxide	13463-67-7	10 – 20 %
Extender	1332-58-7	20 – 40 %
2-methyl propan-1-ol	78-83-1	2 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 30 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters
Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron oxide red 1332-37-2	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Extender 1332-58-7	TWA: 2 mg/m^3	-	TWA: 10 mg/m^3 TWA: 5 mg/m^3
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection	Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Woodcolor	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.40 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity
No specific test data related to reactivity available for this product or its ingredients

Chemical stability
Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions
None under normal processing

Conditions to avoid
Elevated temperatures and sources of ignition.

Incompatible materials
Oxidizing agents

Hazardous Decomposition Products
Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures
Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron oxide red 1332-37-2	> 5000 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Extender 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect No information available

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Reprodutive Toxicity No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Iron oxide red 1332-37-2	-	96h LC50: > 1000 mg/L (Leuciscus idus)	-	-
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see “Section 8. Exposure Controls/Personal Protection” of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT

Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 9023-0000 Egapencil Primer White

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Extender	1332-58-7	20 – 40 %
2-methyl propan-1-ol	78-83-1	2 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 30 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters
Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Extender 1332-58-7	TWA: 2 mg/m^3	-	TWA: 10 mg/m^3 TWA: 5 mg/m^3
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	White	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.50 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	16900 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity
No specific test data related to reactivity available for this product or its ingredients

Chemical stability
Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions
None under normal processing

Conditions to avoid
Elevated temperatures and sources of ignition.

Incompatible materials
Oxidizing agents

Hazardous Decomposition Products
Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures
Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation

Ingestion Harmful if swallowed
Long Term Effects No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Extender 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect No information available

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Reprodutive Toxicity No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h	-
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class 3 Flammable Liquid

UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	QR
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-2512 Egapencil Yellow Staples New

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Iron oxide yellow	51274-00-1	1 – 5 %
Pigment orange	3520-72-7	1 – 5 %
Pigment yellow	5468-75-7	10 – 20 %
Titanium dioxide	13463-67-7	10 – 20 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Pigment yellow 5468-75-7	TWA: 10 mg/m^3	-	-
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	Values	Remarks/ Method

pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.05 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation

Ingestion Harmful if swallowed
Long Term Effects No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Pigment orange 3520-72-7	> 5000 mg/kg (Rat)	-	-
Pigment yellow 5468-75-7	> 5000 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)		24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-7869 Egapencil Blue Violet

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment blue	57455-37-5	5 – 10 %
Pigment blue	147-14-8	1 – 5 %
Pigmen violet	6358-30-1	0.1 – 1 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact	Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment blue 57455-37-5	-	96h LC50 > 32000mg/kg	-
Pigment blue 147-14-8	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection	If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.18 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment blue 57455-37-5	10 g/kg (Rat)	-	-
Pigment blue 147-14-8	> 5000 mg/kg (Rat)	-	-
Pigment violet 6358-30-1	2000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Pigment blue 57455-37-5	-	96h LC50 > 32000mg/kg	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
Pigment blue	6.60
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 9056-0004 Egapencil PSS White

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
2-methyl propan-1-ol	78-83-1	2 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 30 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice — Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact — Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact — Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation — Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion — Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider — Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician — Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage	Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles
Incompatible Products	Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	White	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.50 g/cm^3	None known

Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	16900 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity
No specific test data related to reactivity available for this product or its ingredients

Chemical stability
Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions
None under normal processing

Conditions to avoid
Elevated temperatures and sources of ignition.

Incompatible materials
Oxidizing agents

Hazardous Decomposition Products
Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures
Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect No information available

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Reprodutive Toxicity No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada

WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-4333 Egapencil P 187 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	5 – 10 %
Pigment red	12238-31-2	10 – 15 %
Pigment red	5281-04-9	5 – 10 %
Pigment orange	3520-72-7	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment red 5281-04-9	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known

Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.05 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment red 5281-04-9	> 5000 mg/kg (Rat)	-	-
Pigment red 12238-31-2	> 5000 mg/kg (Rat)	-	-
Pigment orange 3520-72-7	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class 3 Flammable Liquid
UN No 1263
Packing Group III
Proper Shipping Name PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-4053 Egapencil P 214 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	5 – 10 %
Pigmen Pink	980-26-7	1 – 5 %
Fluorescent pink	n.a	5 – 10 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice — Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact — Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact — Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation — Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion — Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider — Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, 3ermiculite, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigmen pink 980-26-7	TWA: 10 mg/m^3	TWA: 15 mg/m^3	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known

Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.08 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment pink 980-26-7	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-6273 Egapencil P 357 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	5 – 10 %
Pigment green	1328-53-6	3 – 5 %
Iron oxide yellow	51274-00-1	10 – 20 %
Pigment black	1333-86-4	1 – 5 %
Pigment yellow	5468-75-7	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Pigment black 1333-86-4	TWA: 3.5 mg/m^3	TWA: 3.5 mg/m^3	-
Pigment yellow 5468-75-7	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.06 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information	
Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation Exposure to vapor or mist may irritate respiratory tract

Eye Contact Causes eye irritation
Skin Contact Causes skin irritation
Ingestion Harmful if swallowed
Long Term Effects No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment green 1328-53-6	2000 mg/kg (Rat)	-	-
Pigment yellow 5468-75-7	> 5000 mg/kg (Rat)	-	-
Pigment black 1333-86-4	> 8000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Pigment Black		Group 2B		

IARC (International Agency for Research on Cancer)
Group 2AB - ***Probably carcinogenic to humans***

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pigment green 1328-53-6	-	96h LC50: 5540 mg/L (Cyprinus carpio)	-	-
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-
Pigment black 1333-86-4	72h EC50 > 10000 mg/l (Scenedesmus subspicatus)	96h LC50: > 1000 mg/L (Brachydanio rerio)	-	24h EC50 > 5600 mg/L
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT

Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Chemical Name	Weight %	SARA 313 - Threshold Values %
Pigment green 1328-53-6	20-25	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product contain Proposition 65 chemicals

Chemical Name	California Prop. 65
Pigment Black	Carcinogen (airborne, unbound (not bound within a matrix) and respirable size (10 micrometer or less in diameter))

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

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If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-5110 Egapencil P 432 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment blue	147-14-8	1 – 5 %
Pigment red	12238-31-2	1 – 5 %
Iron oxide red	1332-37-2	5 – 10 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact	Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment blue 147-14-8	TWA: 10 mg/m^3	-	-
Iron oxide red 1332-37-2	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.20 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment blue 147-14-8	> 5000 mg/kg (Rat)	-	-
Pigment red 12238-31-2	> 5000 mg/kg (Rat)	-	-
Iron oxide red 1332-37-2	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Iron oxide red 1332-37-2	-	96h LC50: > 1000 mg/L (Leuciscus idus)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
Pigment blue	6.60
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

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MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-5214 Egapencil P 479 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
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GHS Label elements , including precautionary statements

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Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

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Store locked up
Store in a well-ventilated place. Keep cool.

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Dispose of contents and containers to an approved waste disposal plant

Other information
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Iron oxide yellow	51274-00-1	10 – 20 %
Iron oxide red	1332-37-2	5 – 10 %
Pigment black	1333-86-4	1 – 5 %
Pigment red	12238-31-2	1 – 5 %
Pigmen violet	6358-30-1	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit,

diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Iron oxide red 1332-37-2	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Pigment black 1333-86-4	TWA: 3.5 mg/m^3	TWA: 3.5 mg/m^3	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection	Wear safety glasses with side shields (or goggles)
Skin and Body Protection	Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.15 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Iron oxide red 1332-37-2	> 5000 mg/kg (Rat)	-	-
Pigment black 1333-86-4	> 8000 mg/kg (Rat)	-	-
Pigment red 12238-31-2	> 5000 mg/kg (Rat)	-	-
Pigment violet 6358-30-1	2000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Pigment Black		Group 2B		

IARC (International Agency for Research on Cancer)

Group 2AB - ***Probably carcinogenic to humans***

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-
Iron oxide red 1332-37-2	-	96h LC50: > 1000 mg/L (Leuciscus idus)	-	-
Pigment black 1333-86-4	72h EC50 > 10000 mg/l (Scenedesmus subspicatus)	96h LC50: > 1000 mg/L (Brachydanio rerio)	-	24h EC50 > 5600 mg/L
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73

Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contain Proposition 65 chemicals

Chemical Name	California Prop. 65
Pigment Black	Carcinogen (airborne, unbound (not bound within a matrix) and respirable size (10 micrometer or less in diameter))

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo

Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-3023 Egapencil P 1585 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment orange	3520-72-7	1 – 5 %
Pigment yellow	5468-75-7	10 – 20 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment yellow 5468-75-7	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.20 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment orange 3520-72-7	> 5000 mg/kg (Rat)	-	-
Pigment yellow 5468-75-7	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see “Section 8. Exposure Controls/Personal Protection” of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-8050 Egapencil P 2102 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment blue	57455-37-5	1 – 5 %
Pigmen violet	6358-30-1	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment blue 57455-37-5	-	96h LC50 > 32000mg/kg	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.18 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment blue 57455-37-5	10 g/kg (Rat)	-	-
Pigment violet 6358-30-1	2000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pigment blue 57455-37-5	-	96h LC50 > 32000mg/kg	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see “Section 8. Exposure Controls/Personal Protection” of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

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Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

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Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
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Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

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End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-6763 Egapencil P 3262 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

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Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	10 – 20 %
Pigment green	1328-53-6	5 – 10 %
Pigment blue	147-14-8	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Pigment blue 147-14-8	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.05 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment green 1328-53-6	2000 mg/kg (Rat)	-	-
Pigment blue 147-14-8	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms -

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pigment green 1328-53-6	-	96h LC50: 5540 mg/L (Cyprinus carpio)	-	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
Pigment blue	6.60
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Chemical Name	Weight %	SARA 313 - Threshold Values %
Pigment green 1328-53-6	20-25	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations
-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-5215 Egapencil P 7696 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Iron oxide red	1332-37-2	5 – 10 %
Pigment black	1333-86-4	1 – 5 %
Titanium dioxide	13463-67-7	5 – 10 %
Iron oxide yellow	51274-00-1	10 – 20 %
Pigment orange	3520-72-7	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.

Large Spills Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron oxide red 1332-37-2	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Pigment black 1333-86-4	TWA: 3.5 mg/m^3	TWA: 3.5 mg/m^3	-
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.02 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron oxide red 1332-37-2	> 5000 mg/kg (Rat)	-	-
Pigment black 1333-86-4	> 8000 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment orange 3520-72-7	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg		> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Pigment Black		Group 2B		

IARC (International Agency for Research on Cancer)

Group 2AB - ***Probably carcinogenic to humans***

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Iron oxide red 1332-37-2	-	96h LC50: > 1000 mg/L (Leuciscus idus)	-	-
Pigment black 1333-86-4	72h EC50 > 10000 mg/l (Scenedesmus subspicatus)	96h LC50: > 1000 mg/L (Brachydanio rerio)	-	24h EC50 > 5600 mg/L
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)		24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contain Proposition 65 chemicals

Chemical Name	California Prop. 65
Pigment Black	Carcinogen (airborne, unbound (not bound within a matrix) and respirable size (10 micrometer or less in diameter))

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By PT. Ega Paintindo
Revision Date -
Revision Note -

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.
Our responsibility for product as sold is subject to our standard terms and conditions.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET

Hazardous Substance, Dangerous Goods

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 4080-6270 Egapencil P 7724 C

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based surface coating
Uses advised against Wood surface on pencil

Details of the supplier of the safety data sheet

Supplier Name PT. EGA Paintindo
Supplier Address Jl. Pasar Kamis no. 88
Kroncong, Tangerang
Indonesia
Supplier Phone Number +62-21-5903210

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements , including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statement
Highly flammable liquid and vapor
May be harmful if swallowed and enters airways
Causes skin irritation
Harmful to aquatic life with long lasting effects

Appereance : Colour liquid
Physical State Liquid
Odor Solvent

Precautionary Statements – Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell rinse mouth. Do NOT induce vomiting

Eyes
This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes

Skin
May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

Precautionary Statements – Storage
Store locked up
Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal
Dispose of contents and containers to an approved waste disposal plant

Other information
The concentrations of the Phthalate content and heavy metals are below the cut-off value/concentration limit for SDS information as required by EN71 part3, ASTM F 9363, EN-14372:2004. For the actual concentrations, see the Certificate of Analysis

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %
Titanium dioxide	13463-67-7	5 – 10 %
Pigment green	1328-53-6	10 – 20 %
Iron oxide yellow	51274-00-1	5 – 10 %
Pigment yellow	5468-75-7	1 – 5 %
Acrylic polymers	n.a	20 – 40 %
Aldehyder binder	n.a	5 – 10 %
Nitro Cellulose	9004-70-0	10 – 20 %
Cellulose Ester	9004-36-8	5 – 10 %
2-methyl propan-1-ol	78-83-1	1 – 5 %
N-butyl acetate	123-86-4	5 – 10 %
Ethyl acetate	141-78-6	8 – 15 %
Acetone ; propan-2-one	67-64-1	5 – 10 %
Plasticizer	8013-07-8	1 – 5 %

4. FIRST AID MEASURES

First aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact	Immediate medical attention is required. Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. Remove contaminated clothing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen through facemask and ensure clear airways. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, carbon dioxide, fire blanket, or dry chemical powder

Unsuitable Extinguishing Media

Use of water spray maybe inefficient

Specific Hazards Arising from the chemical

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Vapour may travel a considerable distance to source of ignition and flashback. Avoid all ignition sources. All potential sources of ignition must be removed both in and near work area. Do NOT smoke.

Protective equipment and precautions for firefighters

On burning may emit toxic fumes. Fire fighters and other likely to be exposed to vapour should wear self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Small Spills	Use personal protective clothing. Avoid contact with skin and eye. Do not breathe vapours.Wipe up with absorbent (clean rag or paper towel). Allow absorbent to dry before disposing with normal household garbage. See protective measures under point 7 and 8.
Large Spills	Shut off of possible source of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Spilled particles present a severe slip hazard. Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Do NOT inhale vapours.

Environmental Precautions

Environmental Precautions	Do not allow to enter into waterways or drains. If the product contaminates lakes, rivers or sewages, inform authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for Containment	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up Sweep up, shovel into waste container, and reuse if possible.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a cool and dry place with explosion proof ventilation. Store away from incompatibles

Incompatible Products Incompatible with strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contol parameters

Exposure Guidelines

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3	-
Iron oxide yellow 51274-00-1	TWA: 10 mg/m^3 total inhalable dust TWA: 4 mg/m^3 respirable dust	-	-
Pigment yellow 5468-75-7	TWA: 10 mg/m^3	-	-
Nitrocellulose 9004-70-0	Ethanol ; TWA : 1000 ppm Isopropanol ; TWA 400 ppm	-	-
2-methyl propan-1-ol 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m^3	TWA: 50 ppm TWA: 150 mg/m^3
N-butyl acetate 123-86-4	TWA: 150 ppm STEL: 200 ppm	-	-
Ethyl acetate 141-78-6	TWA : 1440 mg/m^3 TWA: 400 ppm	-	-
Acetone ; propan-2-one 67-64-1	TWA: 500 ppm TWA: 1210 mg/m^3	-	-

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems
Keep containers closed when not in used

Individual protection measures, such as personal protective equipment

Eye / Face Protection Wear safety glasses with side shields (or goggles)

Skin and Body Protection Wear protective clothing and gloves. Gloves made from nitrile rubber is suitable for intermittent contact. Due to high variations in glove construction and local condition the user should make a final assessment. Always wash hand before drinking, eating, smoking, or using the toilet.

Respiratory Protection	If exposure limits are exceeded or irritation is experienced, respiratory protection should be worn, ventilation and evacuation may be required.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid		
Appearance	Colour liquid	**Odor**	Solvent
Color	Brown	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	18°C	Closed Cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air	No data available	None known
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.20 g/cm³	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Auto ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6000 CPS	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients

Chemical stability

Stable under normal storage conditions. Keep in a cool place

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Elevated temperatures and sources of ignition.

Incompatible materials

Oxidising agents

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, nitrogen oxides, and other toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract
Eye Contact	Causes eye irritation
Skin Contact	Causes skin irritation
Ingestion	Harmful if swallowed
Long Term Effects	No information available for product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.8 mg/L (Rat) 4 h
Pigment green 1328-53-6	2000 mg/kg (Rat)	-	-
Pigment yellow 5468-75-7	> 5000 mg/kg (Rat)	-	-
Nitrocellulose 9004-70-0	13700 mg/kg (Rat) 5840 mg/kg (Rat)	-	20000ppm (Rat) 10h
Cellulose ester 9004-36-8	> 3200 mg/kg (Rat)	> 1000 mg/kg (Guinea Pig)	-
2-methyl propan-1-ol 78-83-1	= 2460 mg/kg (Rat)	-	-
N-butyl acetate 123-86-4	= 14000 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 2000 mg/ m^3 (Rat)
Ethyl acetate 141-78-6	5.6 g/kg (Rat) 11.3 mL/kg	-	> 16000 ppm (Rat) 6h
Acetone ; propan-2-one 67-64-1	= 5800 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	= 20 mg/L (Rat) 4h
Plasticizer 8013-07-8	22400 mg/kg (Rat) > 5000 mg/kg (Rat)	> 19900 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms **-**

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Sensitization No information available

Mutagenic Effect A dimethylsulfoxide (DMSO) suspension of carbon black produced negative result in an Ames test. Organic solvent extract of carbon black, however, can contain traces of polycyclic aromatic hydrocarbon (PAH), which may affect the result in different in-vitro test system. In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believe to be rat specific and consequence of “lung overload”

Reprodutive Toxicity

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Titanium dioxide 13463-67-7	-	48h LC50: >1000 mg/L (Leuciscus idus)	-	-
Pigment green 1328-53-6	-	96h LC50: 5540 mg/L (Cyprinus carpio)	-	-
Iron oxide yellow 51274-00-1	-	96h LC50: > 1000 mg/L (Leuciscus idus)	Pseudomonas putida > 1000 mg/L	-
Nitrocellulose 9004-70-0	-	96h LC50: 5.540 mg/L (Oncorhynchus mykiss) 96h LC50: 8.120 mg/L (Pimephales promelas)	-	24h EC50: 10 mg/l
2-methyl propan-1-ol 78-83-1	-	96h LC50: 1.22 mg/L (Pimephales promelas) 96h LC50: 1000 - 3000 mg/L (Alburnus alburnus)	-	48h EC50: 950 - 1200 mg/l
N-butyl acetate 123-86-4	72h EC50 : 674.7 mg/l (Desmodesmus subspicatus)	96h LC50: 100 mg/l, (Lepomis macrochirus) 96h LC50: 17 - 19 mg/l (Pimephales promelas)	-	24h LC50: 205 mg/l
Ethyl acetate 141-78-6	-	96h LC50: 200.32 mg/L (Heteropneustes fossilis)	-	-
Acetone ; propan-2-one 67-64-1	96h EC50: 100 mg/L (Selenastrum capricornutum)	96h LC50: 5540 mg/L (Oncorhynchus mykiss) 96h LC50: 8120 mg/L (Pimephales promelas) 96h LC50: = 8300 mg/L (Bluegill sunfish)	EC50 =14500 mg/L 15 min	24h EC50: 10 mg/L
Plasticizer 8013-07-8	-	96h LC50: 150 mg/L	EC50 =100 mg/L	-

Persistence and degradability

No data is available on the degradability of this product

Bioaccumulative

Chemical Name	Low Pow
2-methyl propan-1-ol	0.76
N-butyl acetate	1.78
Ethyl acetate	0.73
Plasticizer	6.20

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose in accordance with all applicable federal, state, and local regulations by using appropriate personal protection equipment, see "Section 8. Exposure Controls/Personal Protection" of this SDS

Contaminated Packaging

If possible, material and its container should be recycled. If not, dispose in accordance with all applicable local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAUL TRANPORT
Classified as Dangerous Goods for Transport of Dangerous Goods by Road & Rail.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

Segregation Dangerous Goods: Not to be loaded with explosive, flammable gases, if both are in bulk, toxic gases, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances, however exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name	PAINT

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Dangerous Goods Class	3 Flammable Liquid
UN No	1263
Packing Group	III
Proper Shipping Name:	PAINT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Chemical Name	Weight %	SARA 313 - Threshold Values %
Pigment green 1328-53-6	20-25	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No

Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substance RQs	CERCLA EHS RQs	RQ
2-methyl propan-1-ol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
N-butyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone ; propan-2-one	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

-

International Regulations

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	2	**Instability**	0	**Physical and Chemical Hazards**	**0**
HMIS	**Health Hazard**	2	**Flammability**	2	**Physical Hazard**	0	**Personal Protection**	X

Prepared By	PT. Ega Paintindo
Revision Date	-
Revision Note	-

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End of Safety Data Sheet