

Magic Bond Epoxy Stick

Description: A 2-part epoxy putty stick which repairs leaks, holes, cracks in metal, fiberglass, concrete, and ceramics.

Intended Use: Repairs cracks and breaks in tanks and drums. Plumbing and pipe repair. Repairing machinery and equipment.

Product features: **Fast-curing**
Bonds to wet surfaces
Can be machined, drilled, or tapped using conventional metalworking tools

Limitations:

Typical Physical Properties:

Technical data should be considered representative or typical only and should not be used for specification purposes.

Cured 7 days @ 75° F

Color	Disappearing green dye that cures light grey
Mix Ratio by Volume	1:1
% Solids by Volume	100
Pot Life @ 75F	20 min. @ 75°F
Specific Volume	15.3 in.(3) lbs.
Cured Shrinkage	0.0030 in./in.
Temperature Resistance	Dry: 250°; Wet: 125°F
Coverage/lb	61 sq.in. @ 1/4"
Cured Hardness	83 Shore D
Dielectric Strength	300 volts/mils
Dielectric Constant	28.1
Adhesive Tensile Shear	920 psi
Compressive Strength	12,000 psi
Modulus of Elasticity	7.0 psi x 10(5) in.
Flexural Strength	4,280 psi
Coefficient of Thermal Expansion	21[(in./in. x °F)] x 10(-6)
Thermal Conductivity	1.24 [(cal x cm) / (sec x cm(2) x °C)] x 10(-3)
Mixed Viscosity	Putty
% Water absorption	0.49
Adhesive tensile shear (under water)	1,070 psi
Mixing time	1.5 min.
Shelf life	1 year
Working life	10 min.

Surface Preparation:

1. Thoroughly clean the surface with Devcon® Cleaner Blend 300 to remove all oil, grease, and dirt.
2. Grit blast surface area with 8-40 mesh grit, or grind with a coarse wheel or abrasive disc pad, to create increased surface area for better adhesion (Caution: An abrasive disc pad can only be used provided white mesh is revealed). Desired profile is 3-5mil, including defined edges (do not "feather-edge" epoxy).

Note: For metals exposed to sea water or other salt solution, grit-blast and high-pressure-water-blast the area, then leave overnight to allow any salts in the metal to "sweat" to the surface. Repeat blasting to "sweat out" all soluble salts. Perform chloride contamination test to determine soluble salt content (should be no more than 40ppm).

3. Clean surface again with Cleaner Blend 300 to remove all traces of oil, grease, dust, or other foreign substances from the grit blasting.
4. Repair surface as soon as possible to eliminate any changes or surface contaminants.

WORKING CONDITIONS: Ideal application temperature is 55°F to 90°F. In cold working conditions, heat repair area to 100-110°F immediately prior to applying epoxy to dry off any moisture, contamination, or solvents, as well as to assist epoxy in achieving maximum adhesion properties.

Mixing Instructions:

Mixing is not applicable to this product.

Application Instructions:

- For best results, clean and roughen bond area prior to application.
- Twist or cut off required amount.
- To mix, knead with fingers to a uniform color.
- Apply to surface to be repaired (within 2 minutes of mixing). Force into any cracks or holes to be filled and strike off excess material.
- When applying to a damp, wet, or slowly leading area, work the material forcefully into the area and apply pressure until adhesion begins to take affect.
- Remove excess material before hardening begins.
- For a smooth appearance of the cured compound, hand-rub with water or a damp cloth prior to hardening.

Storage:

Store in a cool, dry place.

Compliances:

None

Chemical Resistance:

Chemical resistance is calculated with a 7 day, room temp. cure (30 days immersion) @ 75°F)

Ammonia	Very good
Chlorinated Solvent	Very good
Hydrochloric 10%	Fair
Kerosene	Very good
Methanol	Poor
Sodium Hydroxide 10%	Very good
Sulfuric 10%	Fair
Toluene	Fair

Precautions:

Please refer to the appropriate material safety data sheet (MSDS) prior to using this product.

For technical assistance, please call 1-800-933-8266

FOR INDUSTRIAL USE ONLY

Warranty:

Devcon will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

Disclaimer:

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Devcon makes no representations or warranties of any kind concerning this data.

Order Information:

11600 4 oz. stick