**TESTS CONDUCTED** 

Thermal Conductivity ASTM C 177

Compressive Strength ASTM D 695

Dielectric Strength, volts/mil ASTM D 149

Cured Hardness Shore D ASTM D 2240 Adhesive Tensile Shear ASTM D 1002



# 2 Ton Epoxy®

**Description:** Extremely strong, medium-cure, water-resistant clear adhesive that will self-level after application.

Intended Use: Bonding parts in a structural environment or potting electronic components and assemblies

**Product** Cures without shrinking features: Cures at room temperature Good impact resistance

Produces strong, rigid bond on metal, ceramics, wood, concrete, glass, or combinations

Limitations:

None

**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

T-peel 2-3 pli Impact Resistance 6.5 ft.-lb./in.(2) **Tensile Elongation** 1% **Shore Hardness** 83 Shore D Gap-Fill Good **Dielectric Strength** 600 volts/mil % Solids by Volume 100

Adhesive Tensile Lap Shear[GBS] 2,250 psi @ 0.010" bondline

**Compression Strength** 11,000 psi Specific Volume 25.2 in.(3)/lb.

### Uncured

Color Clear **Mixed Viscosity** 8,000 cps Mix Ratio by Volume 1:1 Mix Ratio by Weight 1:1

**Mixed Density** 9.17 lbs/gal.: 1.10 gm/cc **Working Time** 8-12 min. (28 gm @ 72°F) **Fixture Time** 30-35 min. @ 72°F **Functional Cure** 2 hrs. @ 72F **Full Cure** 12 hrs.

**Service Temperature** Dry, -40°F to 200°F

Surface Preparation:

Clean surface by solvent-wiping any deposits of heavy grease, oil, dirt, or other contaminants. Surface can also be cleaned with industrial cleaning equipment such as vapor phase degreasers or hot aqueous baths. If working with metal, abrade or roughen the surface to significantly increase the microscopic bond area and increase the bond strength.

#### Mixing Instructions:

---- Proper homogenous mixing of resin and hardener is essential for the curing and development of stated strengths. ----

## 25 ML DEV-TUBE

- 1. Squeeze material into a small container the size of an ashtray.
- 2. Using mixing stick included on Dev-tube handle, vigorously mix components for one (1) minute.
- 3. Immediately apply to substrate.

#### 50 ML/400ML/490 ML CARTRIDGES

- 1. Attach cartridge to Mark 5 dispensing system.
- 2. Open tip.
- 3. Burp cartridge by squeezing out some material until both sides are uniform (ensures no air bubbles are present during
- 4. Attach mix nozzle to end of cartridge.
- 5. Apply to substrate.

#### Application Instructions:

- 1. Apply mixed epoxy directly to one surface in an even film or as a bead.
- 2. Assemble with mating part within recommended working time.
- 3. Apply firm pressure between mating parts to minimize any gap and ensure good contact (a small fillet of epoxy should flow out the edges to display adequate gap fill.)

For very large gaps:

- 1. Apply epoxy to both surfaces
- 2. Spread to cover entire area OR make a bead pattern to allow flow throughout the joint

Let bonded assemblies stand for recommended functional cure time prior to handling.

CAPABILITIES:

Can withstand processing forces Do not drop, shock load, or heavily load

Full bond strength is reached in 16 hours.

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) @ 75F)

Acetic (Dilute) 10%	Poor
Acetone	Fair
Ammonia	Very good
Corn Oil	Excellent
Cutting Oil	Excellent
Ethanol	Poor
Gasoline (Unleaded)	Excellent
Glycols/Antifreeze	Excellent

Hydrochloric 10%	Poor
Isopropanol	Poor
Kerosene	Excellent
Methyl Ethyl Ketone	Poor
Mineral Spirits	Excellent
Motor Oil	Excellent
Sodium Hydroxide 10%	Very good
Sulfuric 10%	Poor

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: 

 14260
 50 ml Dev-Pak

 14355
 400 ml cartridge

 DA 039
 10 gal white

 DA 040
 100 gal white

 DA 048
 100 gal black

 14310
 25 ml DevTube

 14360
 9 lb.

Distributed by:

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