



# Technical Data Sheet 4/13/2018

# 5 Minute® Epoxy Gel

**Description:** Thixotropic/non-migrating gel adhesive with excellent gap-filling properties.

Intended Use: Bonding metal, ceramic, wood and vertical surface where gap-filling is needed.

Product Good solvent resistance features: Fills gaps to .250 inches Non-sagging adhesive

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

Adhesive Tensile Lap Shear[GBS] 2,500 psi @ 0.010" bondline
Dielectric Strength 440 volts/mils

Gap Fill Excellent
Impact Resistance 6.5 ft.lb./in(2)
Service Temperature -40°F to 200°F
Shore Hardness 80 Shore D

Solids by Volume 100

Specific Volume 23.7 in[3]/lb.

Tensile Elongation 5%
Tpeel 2-3 pli

Uncured

Color Opaque

Fixture Time 10-15 min. @ 72°F

Full Cure 48 hrs.

Functional Cure 1.5 hr. @ 72°F

Mix Ratio by Volume 1:1

Mix Ratio by Weight 1:

Mixed Density 9.75 lbs/gal.: 1.17 gm/cc

Mixed Viscosity

Working Time 4-7 min. [28 gm @ 72°F]

#### **TESTS CONDUCTED**

Adhesive Tensile Shear ASTM D 1002 Cured Density ASTM D 792 Dielectric Strength, volts/mil ASTM D 149 Compressive Strength ASTM D 695 Cured Hardness Shore D ASTM D 2240

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 V ™ [50ml] 400ml manual or pneumatic dispensing systems.
- 2. Open tip.
- 3. Burp cartridge by squeezing out some material until both sides are uniform (ensures no air bubbles are present during mixing).
- 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

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)

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

Hydrochloric 10%	Poor
Isopropanol	Poor
Kerosene	Excellent
Methyl Ethyl Ketone	Poor
Mineral Spirits	Excellent
Mineral Spirits Motor Oil	Excellent Excellent
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Please refer to the appropriate safety data sheet (SDS) prior to using this product. Precautions:

For technical assistance, please call 1-855-489-7262

FOR INDUSTRIAL USE ONLY

Warranty: ITW Performance Polymers 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

Performance Polymers makes no representations or warranties of any kind concerning this data.

Order 14240 25 ml Dev-Tube™ Information: 50 ml cartridge 14265 **DA052** 

400 ml cartridge

