



A brand of ITW Polymers Adhesives North America

Technical Data Sheet

3/16/2012

5 Minute® Epoxy

Description:	A rapid-curing, general purpose adhesive/encapsulant.
Intended Use:	Bonds metals, fabrics, ceramics, glass, wood, and concrete (in combinations)
Product features:	100% reactive, no solvents Good solvent resistance Bonds metals, fabrics, wood, and concrete
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]	1,900 psi @ 0.005" bondline
Dielectric Strength	490 volts/mils
Gap Fill	Good
Impact Resistance	5.5 ft.lb./in.(2)
Service Temperature	Dry, -40°F to 200°F
Shore Hardness	85 Shore D
Solids by Volume	100
Specific Volume	25.1 in.[3]/lb.
Tensile Elongation	1%
Tpeel	2-3 pli

TESTS CONDUCTED

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

Uncured

Color	Light Amber
Fixture Time	10-15 min. @ 72°F
Full Cure	12 hr. @ 72°F
Functional Cure	3/4 - 1 hr. @ 72°F
Mix Ratio by Volume	1:1
Mix Ratio by Weight	1:1
Mixed Density	9.17 lbs./gal.: 1.10 gm/cc
Mixed Viscosity	10,000 cps
Working Time	3-6 min. (28 gm @ 72°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 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	Hydrochloric 10%	Poor
Acetone	Poor	Isopropanol	Poor
Ammonia	Poor	Kerosene	Excellent
Corn Oil	Excellent	Methyl Ethyl Ketone	Poor
Cutting Oil	Excellent	Mineral Spirits	Excellent
Ethanol	Poor	Motor Oil	Excellent
Gasoline (Unleaded)	Excellent	Sodium Hydroxide 10%	Poor
Glycols/Antifreeze	Fair	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:

14210	2.5 oz.
14630	9 lb.
DA051	400 ml cartridge
14250	25 ml Dev-Tube™
14270	50 ml cartridge
14200	15 oz.