

# **Dev-Thane™ 5**

Description:

A two-part, fast setting. primerless high performance urethane adhesive for bonding many different substrates such as steel, aluminium, ABS, urethane, and composites.

Intended Use:

Bonds steel, aluminium, stainless steel, concrete, wood, glass, ABS, and urethanes with no primers.

Product features:

Limitations:

When dispensing through a pneumatic gun use only 30-35 psi or pressure for good mixing.

Use Devcon's #14291 mix nozzle with our pneumatic gun, and #14296 with our manual gun for efficient mixing Shelf Life: 9 months

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[ABS] 630 psi Adhesive Tensile Lap Shear[AL] 1,940 psi Adhesive Tensile Lap Shear[concrete] 1,200 psi Adhesive Tensile Lap Shear[GBS] 2,750 psi Adhesive Tensile Lap Shear[Glass] **Substrate Failure** Adhesive Tensile Lap Shear[SMC] 895 psi Adhesive Tensile Lap Shear[SS] 1,840 psi Adhesive Tensile Shear[galvanized mtl] 1,850 psi 0.0014 in./in. **Cure Shrinkage Dielectric Strength** 350 Gap Fill good **Shore Hardness** 63D Solids by Volume 100

Specific Vojume 19.6 in.(3)/lb.
Tear Resistance 400 pli
Tensile Elongation 200%
Tensile Strength 2,100 psi
Tpeel 65-75 pli

# Uncured

Color Grey

Coverage/lb 78 sq. in./lb. @ 1/4"
Fixture Time 30 minutes
Full Cure 24 hours
Functional Cure 3 hours
Mix Ratio by Volume 1:1
Mix Ratio by Weight 1:1

Mixed Density 11.75 lbs./gal
Mixed Viscosity Thixotropic paste
Service Temperature -40 °F to 250 °F

Viscosity Resin: 20,000 cps: Curing Agent: 20,000 cps

Working Time 5 min. @ 75°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.

# **TESTS CONDUCTED**

Adhesive Tensile Shear ASTM D 1002 Dielectric Strength, volts/mil ASTM D 149 Tear Resistance ASTM D 624 Tensile Strength (Epoxies) ASTM D 638 Cured Hardness Shore D ASTM D 2240 Maximum Elongation ASTM D 412 Cure Shrinkage ASTM D 2566 T-Peel Strength ASTM D 1876

- 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.
- 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. Mount cartridge onto manual gun or pneumatic gun .
- 2. Attach mix nozzle .
- 3. Clip mix nozzle back to desired orifice size.
- 4. Squeeze cartridge allowing first THREE inches of material to discharge until unified mixture is extruding from nozzle.
- 5. Apply to surface and attach other substrate quickly, as you have 5 minutes of working time to use the product.

Substrates can be clamped with a bond line thickness as small as 0.007".

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)

Cutting Oil	Excellent
Gasoline (Unleaded)	Fair
Hydrochloric 10%	Excellent
Isopropanol	Fair
Methyl Ethyl Ketone	Poor
Motor Oil	Excellent
Sodium Chloride Brine	Excellent
Sodium Hydroxide 10%	Excellent

Ketone Poor

Toluene

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:

14500 400 ml cartridge 14503 50 ml Dev-Pak

Distributed by:

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