

Dev-Thane™ 2

Description:

A two-part, fast-setting, primerless high performance urethane adhesive that is high viscosity and can be used on a vertical surface with sagging up to 3/8".

Intended Use:

For Indutrial Use: Bonds steel, aluminum, stainless steel, galvanized steel, concrete, wood, glass, ABS, and urethanes with no primers.

Features:

Room Temperature Cure

Limitations:

Suitability of product is determined by the end user for their application and process. When dispensing through a pneumatic gun we receommend only 30-35 psi of pressure for good mixing. (0.2 Mpa) Use Devcon's #14291 or #3333 mix nozzles with our pneumatic gun, and #14293 with our manual gun for efficient mixing Shelf Life: 1 Year

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 (24°C) **Typical Values** 630 psi, 4 MPa (Subst. Fail.) Adhesive Tensile Lap Shear [ABS] Adhesive Tensile Lap Shear [AL] 1,270 psi (8.8 MPa) Adhesive Tensile Lap Shear [concrete] 1,200 psi (8.2 MPa) Adhesive Tensile Lap Shear [GBS] 2.750 psi (19 MPa) Adhesive Tensile Lap Shear [Glass] Substrate Failure Adhesive Tensile Lap Shear [SMC] 895 psi (6 MPa) 1,840 psi (12.7 MPa) Adhesive Tensile Lap Shear [SS] Adhesive Tensile Shear [galv. mtl] 1,575 psi (10.9 MPa) Cure Shrinkage 0.0014 in/in (cm/cm) Dielectric Strenath 350

Gap Fill good . Hardness 63 Shore D Service Temperature -40°F to 200°F (-40 to 93°C)

Solids by Volume 100 Tear Resistance 400 pli Tensile Elongation 200%

Tensile Strength 2,100 psi (14.5 MPa) Tpeel 65-75 pli (11-13 N/mm)

Uncured

Color Mixed Coverage (10 mil / 0.254 mm)

6 in2/mL (38.7 cm2/mL) Fixture Time 20 minutes Full Cure 24 hours **Functional Cure** 1.5 hours Mix Ratio by Volume 1:01 Mix Ratio by Weight 1.01

Mixed Density 11.75 lb/gal (1.41 g/cm3) 100,000 cps Mixed Viscosity Specific Volume 19.6 in3/lb (0.71 cm3/g)

Viscosity Resin: 45,000 cps: Curing Agent: 140,000 cps

Working Time 2 min. @ 75°F (24°C)

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.
- 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.

Standard Tests

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

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" (0.01 cm).

Storage:

Store in a cool, dry place.

Compliances:

RoHS

Chemical Resistance:

Chemical resistance is calculated with a 7-day, room temp. cure (30 days immersion) @ 75°F (24°C)

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

Precautions:

FOR INDUSTRIAL USE ONLY: Please refer to the appropriate <u>S</u>afety <u>D</u>ata <u>S</u>heet prior to using this product.

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.

Order Information:

Item No.Package Size14500400 ml cartridge1450350 ml cartridge

Contacts:

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Disclaimer:

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