



Dev-Thane™ 5

Description: A two-part, fast setting. Primer free high-performance urethane adhesive for bonding many different substrates such as steel, aluminum, ABS, urethane, and composites

Intended Use: For Industrial 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 use only 30-35 psi of pressure for good mixing. (0.2 Mpa)
Use Devcon's #14291 mix nozzle 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)

Property	Typical Values
Adhesive Tensile Lap Shear[ABS]	630 psi, 4 MPa (Subst. Fail.)
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)
Adhesive Tensile Lap Shear[SS]	1,840 psi (12.7 MPa)
Adhesive Tensile Shear[galv. mtl]	1,575 psi (10.9 MPa)
Cure Shrinkage	0.0014 in/in (cm/cm)
Dielectric Strength	350
Gap Fill	good
Hardness	63 Shore D (-40 to 93°C)
Service Temperature	-40°F to 200°F
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)

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

Uncured

Color	Grey
Coverage (10 mil / 0.254 mm)	6 in ² /mL (38.7 cm ² /mL)
Fixture Tim	45 minutes
Full Cure	24 hours
Functional Cure	4 hours
Mix Ratio by Volume	1:01
Mix Ratio by Weight	1:01
Mixed Density	11.75 lb/gal (1.41 g/cm ³)
Mixed Viscosity	45,000 cps
Specific Volume	19.6 in ³ /lb (0.71 cm ³ /g)
Viscosity	Resin: 45,000 cps: Curing Agent: 45,000 cps
Working Time	5 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.
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. 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	Toluene	Poor
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 Safety Data Sheet 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:

<u>Item No.</u>	<u>Package Size</u>
14500	400 ml cartridge
14503	50 ml cartridge

Contacts:

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Disclaimer:

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