Dev-Thane™ 2130

2-component PU structure adhesive

PRODUCT DESCRIPTION

The Dev-Thane™ 2130 is a structure adhesive with very high mechanical performances for structure bonding a large variety of substrates: mainly composites (GRP, epoxy, etc.) but also thermoplastics, metal, wood, concrete, fibrocement, etc.

- Thixotropic (it does not sag).
- Fast cure at room temperature.
- Good resistance to temperature, humidity and weathering.
- Very high mechanical resistance.

PRODUCT CHARACTERISTICS

Chemical Class	Polyurethane
Appearance(mixed)	Gray
% Solids by Volume	100
Shelf life, months	12

TYPICAL PROPERTIES OF UNCURED MATERIALS

Resin Part	
Appearance	Milky
Specific gravity@25 ºC	1.23
Viscosity@25 ºC, Brookfield	
Spindle #92, 20 rpm, cP	50000~90000
Thixotropic Index, 2rpm/20rpm	3.3
Hardener Part	
Appearance	Black
Specific gravity@25 ºC	1.87
Viscosity@25 ºC, Brookfield	
Spindle #92, 20 rpm, cP	50000~90000
Thixotropic Index, 2rpm/20rpm	2.3
Mixed	
Mix Ratio, by vol, Resin to Hardener	100 : 100
Mix Ratio, by wt, Resin to Hardener	100 : 152
Working time @ 25ºC, mins	30
Fixture time @ 25ºC, hrs	3.5
Full cure @ 25ºC, days	7

TYPICAL PROPERTIES OF CURED MATERIALS

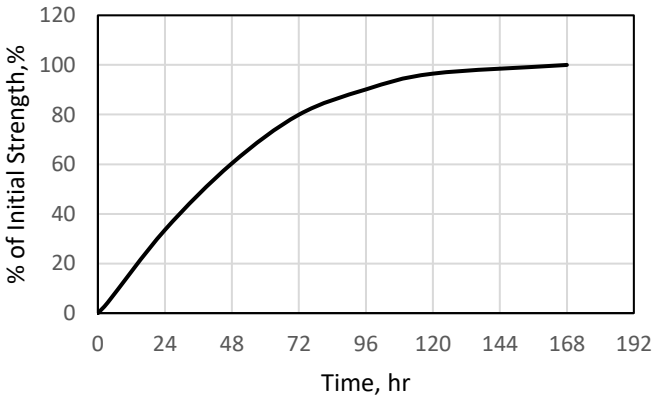
Fully Cured Product (7 days @ 25 ºC)

Density(cured), g/cm^3	1.55
Coefficient of thermal conductivity, ASTM E1461, W/(m·K)	0.5
Shore D hardness, ASTM D2240	70
Tensile strength, ASTM D638, MPa	18.7
E modulus, ASTM D638, MPa	2650
Elongation at break, ASTM D638	5~10%
Shear strength on Stainless steel, ASTM D1002, MPa	12.97
Shear strength on Galvanized steel, ASTM D1002, MPa	13.92
Shear strength on Al alloy 3003, ASTM D1002, MPa	10.03
Shear strength on Al alloy 6061, ASTM D1002, MPa	11.03
Shear strength on Al, ASTM D1002, MPa	10.01
Shear strength on PET film, ASTM D1002, MPa	1.51

TYPICAL CURING PROCESS

7days @ 25 ℃. For ultimate chemical and thermal resistance, allow parts to cure overnight at room temperature, then follow with 2hrs of 80℃ exposure.

Tensile Shear Strength Development on Al3003



SURFACE PREPARATION

The surfaces must be dry, degreased and dust free. The treatment may be varied according the substrate (paper sanding, degreasing, Corona treatment, etc.): consult with the technical service.

MIXING INSTRUCTIONS

Proper homogenous mixing of resin and hardener is

essential for curing and development of stated strengths.
400ML Cartridges
1. Attach cartridge to Mark 400ml manual or pneumatic dispensing systems
2. Open tip.
3. Burp cartridge by squeezing out some material until both sides are uniform (ensure 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 should flow out the edges to display adequate gap fill).

PRECAUTIONS

Please refer to the appropriate material safety data sheet (MSDS) prior to using this product.

STORAGE

Store the unopened product in a cool, dry, well ventilated location away from sources of heat. Optimal storage temperatures should range between **10 ºC (50 ºF) and 30 ºC (86 ºF).** Product removed from the containers during use should not be returned to original containers in order to avoid potential contamination.

ORDER INFORMATION

30008 Adhesive(PartA) 5gal

30009 Hardener(PartB) 5gal

30006 400ml cartridge

CONVERSIONS

(°C x 1.8) + 32 = °F
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm^2 x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

WARRANTY

ITW will replace any material found to be defective. Because the storage, handling and application of this material are beyond our control, we can accept no liability for the results obtained.

NOTE

The following supersedes any provision in your company's forms, letters and papers. ITW makes NO WARRANTY, WHETHER EXPRESSED OR IMPLIED, and INCLUDING WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE FOR THIS PRODUCT. No statements or recommendations contained in the product literature are to be construed as inducements to infringe any relevant patent, now or thereafter in existence. UNDER NO CIRCUMSTANCES SHALL ITW BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES FROM ALLEGED NEGLIGENCE BREACH OF WARRANTY, STRICT LIABILITY OR ANY OTHER THEORY, ARISING OUT OF THE USE OR HANDLING OF THIS PRODUCT. The sole liability of ITW for any claims arising out of the manufacture, use or sale of its products shall be to refund the buyer's purchase price, provided such products have been demonstrated in ITW sole opinion, to justify such refund.

For technical assistance, please call: 86-021-54265119

FOR INDUSTRIAL USE ONLY