

EVOLUTION 2590-3

EVOLUTION 2590-3 is a 1:1 by volume, slow curing polyurethane resin. It is designed to be sprayed with chopped glass and cures to a hard and durable coating. When used for fiber reinforcement a minimum thickness of 80 mils is recommended. Gel time is affected by thickness application. The thicker it is applied, the faster it will cure.

APPLICATIONS

- Fiber Reinforcement @a minimum of 80 mils
- Industrial
- Textiles

PRODUCT ADVANTAGES

- Convenient Mix Ratio
- High tensile and tear strength

*Values given are not intended to be used in specific preparation

Component Properties

Specific Gravity - 74°F, ISO	1.15
Specific Gravity - 74°F, POL	1.05
Viscosity - ASTM D-2196 - 74°F, ISO	150 - 225 cps
Viscosity - ASTM D-2196 - 74°F, POL	350 - 400 cps

Reactivity Profile

Ratio by Weight - ISO:POL	1.1:1
Ratio by Volume - ISO:POL	1:1
Pot Life - 100g	5.5 - 6.5 Minutes
Gel Time - 100 gram sample, 74°F	5.5 Minutes
Sprayed Gel Time	25 Minutes
Test Temperature	74 °F
Full Cure	72 Hours

Typical Physical Properties

Hardness - ASTM D2240 - Shore D	70 - 75 Shore D
Tear Strength - ASTM D624, Die C	975 pli
Tensile Modulus - ASTM D412	191000 psi
Tensile Strength - ASTM D412	5850 psi
Elongation - ASTM D412	12.5 %
Izod Impact Notched - ASTM 256A	5.51 ft.lb/in
Izod Impact Unnotched - ASTM 256E	7.38 ft.lb/in

RECOMMENDED HANDLING INSTRUCTIONS

Always mix/roll Pol side prior to use to ensure a homogenous product.

Pol side should be mixed or recirculated periodically to remix moisture absorbing powders.

EVOLUTION 2590-3 is a polyurethane material designed to be spray applied from high pressure plural component heated equipment. Typical equipment for application includes:

Graco E-30, E-XP, H-XP, H-20/35, H-40 or equivalent sprayed through a Fusion MP or AP, GX-7, Probler P-2 or equivalent gun with a Flat Tip AF 2929 424 Tip.

Recommended machine settings are 1500 psi for pressure and 140° F for all temperatures. Please contact Isotec® for any other machine or application questions.

When finishing application of coating the next day:

Lightly abrade the sprayed surface to remove gloss. Remove dust and clean surface with a solvent such as acetone or isopropyl alcohol. Allow solvent to dry for 30 minutes before spraying the coating. Do not spray past the area that has been prepared.

STORAGE

Protect Iso and Pol side from moisture. If the Iso side material is exposed to moisture, including moisture from the air, it will release CO² gas. If placed in a sealed container, this gas can cause a dangerous build up of pressure potentially resulting in injury or death. If the Pol side is exposed to excess moisture and then applied it may cause weak or foamed material to be applied.

SAFETY

- Refer to the product SDS for all relevant safety information.
- Use only in well-ventilated areas.
- Wear chemically resistant rubber gloves, safety glasses, and an apron.
- Avoid prolonged or repeated contact with skin.
- In case of skin contact, wipe affected area with isopropyl alcohol, followed by soap and water.
- In case of eye contact, flush eyes with water for 15 minutes and consult a physician.
- If swallowed or comes into contact with eyes, seek medical attention immediately.

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- Reported laboratory test results of the color stability in no way relates to the actual performance upon exposure to light sources. Since all aromatic urethanes experience color degradation upon ultraviolet light exposure, Seller shall not be liable for any damages resulting from ultraviolet light color degradation of any aromatic urethane systems manufactured or sold by Seller.
- The liability of the Seller shall not exceed the purchase price and the Buyer shall not be entitled to nor the Seller be liable for any consequential, incidental, indirect or special damages resulting in any manner from the furnishing of the product.

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