

DFense Blok™ Surface Wetting Agent

Description:

Thixotropic epoxy gel system that improves ease of application and cured adhesion properties (shear, peel, impact) of Devcon® DFense Blok™ abrasion resistant product.

Intended Use:

Apply to substrate surface prior to using DFense Blok™ for better adhesion.

Features:

Requires no waiting to apply topcoat, Excellent chemical resistance, Non-sagging

Limitations:

Recommended minimum application thickness of 0.01" (0.254 mm)

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)

Adhesive Tensile Shear

Color

Compressive Strength

Cured Hardness

Flexural Strength

Adhesive Tensile Shear

2,616 psi (18 MPa)

Orange

5,032 psi (35 MPa)

71 Shore D

6,700 psi (46 MPa)

Solids by Volume 100%

Specific Volume 24.7 in3/lb (0.892 cm3/g)

Temperature Resistance 300 °F (149°C)

Uncured Properties @ 72°F (23°C)

Coverage (12 mil / 0.305mm) 12.9 ft2/lb (2.65 m2/Kg)

Cure Time 16 hours

Functional Cure 4-5 hours @ 72°F (22°C)

Mix Ratio by Volume 2:1
Mix Ratio by Weight 100:44

Mixed Density 9.2 lb/Gal (1.15 g/cm3)
Mixed Viscosity Thixotropic Gel

Pot Life @ 75 °F 12-15 minutes @ 72°F (22°C)

Topcoat Application Time 0-45 minutes

Standard Tests

Cured Hardness Shore D ASTM D 2240 Compressive Strength ASTM D 695 Flexural Strength ASTM D 790 Adhesive Tensile Shear ASTM D 1002

Surface Preparation:

- 1. Thoroughly clean the surface with Devcon® Cleaner Blend 300 to remove all oil, grease and dirt.
- 2. Grit blast surface area with 8-40 mesh grit, or grind with a coarse wheel or abrasive disc pad, to create increased surface area for better adhesion (Caution: An abrasive disc pad can only be used provided white metal is revealed). Desired profile is 3-5mil, including defined edges (do not "feather-edge" epoxy).

Note: For metals exposed to sea water or other salt solution, grit-blast and high-pressure-water-blast the area, then leave overnight to allow any salts in the metal to "sweat" to the surface. Repeat blasting to "sweat out" all soluble salts. Perform chloride contamination test to determine soluble salt content (should be no more than 40ppm).

- 3. Clean surface again with Devcon® Cleaner Blend 300 to remove all traces of oil, grease, dust or other foreign substances from the grit blasting.
- 4. Repair surface as soon as possible to eliminate any changes or surface contaminants.

WORKING CONDITIONS: Ideal application temperature is 55°F to 90°F (13- 32°C). In cold working conditions, directly heat the repair area to 100-110°F (38-43°C) prior to applying epoxy and maintain at this temperature during product cure to dry off any moisture, contamination or solvents, as well as to achieve maximum performance properties.

Mixing Instructions:

- ---- It is strongly recommended that full units be mixed, as ratios are pre-measured. ----
- 1. Add hardener to resin
- 2. Mix thoroughly with screwdriver or similar tool (continuously scrape material away from sides and bottom of container) until a uniform, streak-free consistency is obtained.

INTERMEDIATE SIZES (1,2,3 lb. units): Place resin and hardener on a flat, disposable surface such as cardboard plywood or plastic sheet. Use a trowel or wide-blade tool to mix the material as in Step 2 above

LARGE SIZES: (25 lb., 30 lb., 50 lb. buckets): Use a T-shaped mixing paddle or a propeller-type Jiffy Mixer Model ES on an electric drill. Thoroughly fold putty by vigorously moving paddle/propeller up and down until a homogenous mix of resin and hardener is attained.

Application Instructions:

- Add hardener to resin and mix thoroughly until colors blend and become uniform, approximately 3 minutes.
- Apply the mixture to surface with spatula, trowel, etc.

- Apply at a thickness of 0.01" to 0.02". (0.254 mm to 0.508 mm)

- Apply topcoat of Dfense Blok™ within 0 - 45 minutes of mixing/applying Dfense Blok™ Surface Wetting Agent. Should this window be exceeded and the Dfense Blok™ Surface Wetting Agent becomes firm, a recoat with fresh Dfense Blok™ Surface Wetting Agent is recommended.

Storage:

Compliances:

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

Gasoline (Unleaded)	Fair
Hydrochloric 10%	Very good
Mineral Spirits	Poor
Sodium Hydroxide, 50%	Excellent
Sulfuric 10%	Very good

Store at room temperature, 70°F (21°C).

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: Item No. Package Size 11340 1 lb. kit (454 g)

Contacts:

www.itwpp.com

ITW Performance Polymers (EMEA) ITW Performance Polymers (US)

Bay 150. Shannon Industrial Estate 30 Endicott Street Shannon, County Clare, Ireland V14 DF82 Danvers, MA 01923 USA TEL: +353 61 771 500 TEL: 855 489 7262 FAX: +353 61 471 285 FAX: 978 774 0516 Email: customerservice.shannon@itwpp.com Email: info@itwpp.com

Disclaimer:

Product Use: The information herein is based upon good faith testing that ITW PP believes are reliable, but the accuracy or completeness of such information is not guaranteed. Many factors beyond ITW PP control and uniquely within user's knowledge and control can affect the use and performance of an ITW PP product in a particular application. Given the variety of influencers on performance, the data here is not intended to substitute end user testing. It is the end users sole responsible for evaluating any ITW PP product and determining whether it is fit for a particular purpose and suitable for user's design, production, and final application.

Exclusion of Warranties: As to the herein described materials and test results, there are no warranties which extend beyond the description on the face hereof. ITW PP makes no other warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. Since the use of the herein described involves many variables in methods of application, design, handling and/or use, the user, in accepting and using these materials, assumes all responsibility for the end result. ITW PP shall not otherwise be liable for loss of damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.