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# POLYSURF UV-GUARD 8011 Aliphatic Polyaspartic Polyurea Topcoat

# **Product Description:**

PolySurf UV-Guard 8011 is a high solids, spray-applied, aliphatic polyaspartic polyurea with excellent retention, gloss and UV stability characteristics. It can be applied at any thickness of 8-12 mils (200-300 microns) in a single pass on horizontal surfaces or multiple passes on vertical surfaces. PolySurf UV-Guard 8011 is quick curing and specifically formulated to be installed in thin film

# Features:

- Quick Cure
- Color Stable
- High Tensile Strength
- Very Durable
- Abrasion Resistant
- Excellent Weatherability
- Topcoat over aromatic polyurea, polyurethane and epoxy applications ranging from 35°F to 130°F, service temperature 0°F to 200°F
- UV Resistant For Superior Gloss Retention
- Meets California VOC and AQMD Requirements, including SCAQMD areas

# **Typical Uses:**

- Concrete
- Plywood
- Cold Storage Areas
- Industrial Warehouses
- Chemical Plants
- Off-Shore Oil Platforms
- Steel
- Plastic
- Food Processing Areas
- Pulp and paper Mills
- Fertilizer Plants
- Pineline Barnes
- Versatile Application: Can be applied by squeegee, phenolic resin core roller, plural component high pressure spray, or through a Pressure Pot.

Colors: Clear, Tan and Dolphin Grey

**Packaging:** 2 gallon kit (7.5 liter): 1 gallon (3.78 liters) Part-A and 1 gallon (3.78 liters) can Part-B

- 10 gallon kit is not an in-stock item and is available with advanced notice. Contact U.S. Polymer Surfaces for availability.

# Mixing:

PolySurf UV-Guard 8011 may not be diluted under any circumstance. Proportions are premeasured. PolySurf UV-Guard 8011 Part-A and Part-B should be mixed individually before combining. Add Part-B to Part-A while mixing, using a mechanical mixer at medium speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes) and mix frequently during application to maintain uniform color. Do not thin. Do not mix in an up and down motion

Use care to scrape the sides of the container to ensure that no unmixed material remains.

# **POLYSURF UV-GUARD 8011**

# Technical Data Sheet

# Technical Data is based on draw down film POLYSURF UV-Guard 8011 - CLEAR

Mix Ratio by Volume	1A : 1B		
Coverage Rate	1 gal/100 sq. ft.		
Dry Film Thickness, exclusive of aggregate	15 mils 381 microns		
Pot Life at 75°F (24°C), 50% R.H.	30-40 minutes		
Hardness, ASTM D-2240	65 ± 2 Shore D		
Tear Resistance, Die C, ASTM D-624	450 ± 50 pli 78.8 ± 8.8 kN/m		
Tensile Strength, ASTM D-412	3000 ± 200 psi 20.7 ± 1.4 Mpa		
Ultimate Elongation, ASTM D-412	70 ± 10%		
Specific Gravity, Side A Side B	1.14 1.06		
Total Solids by Weight, ASTM D-2369	90 ± 2%		
Total Solids by Volume, ASTM D-2697	91 ± 2%		
Viscosity at 75°F (24°C), Side A Side B	300 ± 100 cps 1000 ± 300 cps		
Volatile Organic Compounds, ASTM D-2369-81	0 lb/gal 0 gm/liter		

# Technical Data is based on draw down film POLYSURF UV-Guard 8011 - PIGMENTED

Mix Ratio by Volume	1A:1B		
Coverage Rate	1 gal/100 sq./ ft.		
Dry Film Thickness, exclusive of aggregate	15 mils 381 microns		
Pot Life at 75°F (24°C), 50% R.H.	30-40 minutes		
Hardness, ASTM D-2240	65 ± 2 Shore D		
Tear Resistance, Die C, ASTM D-624	400 ± 50 pli 70.1 ± 8.8 kN/m		
Tensile Strength, ASTM D-412	3000 ± 200 psi 20.7 ± 1.4 Mpa		
Ultimate Elongation, ASTM D-412	50 ± 10%		
Specific Gravity, Side A Side B	1.14 1.28		
Total Solids by Weight, ASTM D-2369	91 ± 2%		
Total Solids by Volume, ASTM D-2697	91 ± 2%		
Viscosity at 75°F (24°C), Side A Side B Volatile Organic Compounds,	300 ± 200 cps 1400 ± 300 cps		
ASTM D-2369-81	0 lb/gal 0 gm/liter		

Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life. Do not mix any material that cannot be used within 20-30 minutes

#### Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Atmospheric:

SSPC-SP6/NACE 3, 2 mils (50 microns) profile

Concrete & Masonry:

SSPC-SP13/NACE 6 or ICRI

No. 310.2 CSP 3-5. Primer required.

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C ST 2	SP 2	-
ŭ	Pitted & Rusted	D ST 2	D ST 2	SP 2	-
Power Tool Cleaning	Rusted	C ST 3	C ST 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

**Surface Preparation Standards** 

# Application:

PolySurf UV-Guard 8011 can be applied by phenolic resin core roller, plural component high pressure spray, or through a Pressure Pot. PolySurf UV-Guard 8011 should be applied at a minimum film thickness of 5 mils. It should be noted that the heavier the application, the longer the curing process takes.

For best results, use an airless sprayer. A phenolic resin core roller may be used, but extra care should be taken not to cause air bubbles.

# **Curing:**

At 75°F (24°C) and 50% relative humidity, allow each coat to cure 3-4 hours. Cure time will vary depending on temperature and humidity.

Allow 6 hours before permitting light pedestrian traffic and at least 24-48 hours before permitting heavy pedestrian traffic on to the finished surface.

Uncured PolySurf UV-Guard 8011 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. If more than 48 hours passes between coats, re-prime the surface with U.S. Polymer Surfaces primer before proceeding.

Low temperature and/or low humidity extend the cure time.

## **Equipment Cleanup:**

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

#### Storage:

PolySurf UV-Guard 8011 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

# Limitations:

The following conditions must not be coated with U.S. Polymer Surfaces **deck coatings or systems:** split slabs, buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, magnesite, and lightweight concrete. On grade slabs may receive U.S. Polymer Surfaces system coatings provided a moisture-vapor transmission test is first performed. Please contact U.S. Polymer Surfaces technical department with the results.

With regard to coating asphalt surfaces, please contact U.S. Polymer Surfaces technical department.

Surfaces must be dry, clean and free of foreign matter. Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications. Surface may be slippery when wet. Containers that have been opened must be used as soon as possible. Do not dilute under any circumstance.

# Warning:

This product contains Isocyanates.

# Limited Warranty:

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local U.S. Polymer Surfaces International representative or visit our website for current technical data and instructions.

U.S. Polymer Surfaces International warrants its products to be free of manufacturing defects and that they will meet U.S. Polymer Surfaces International current published physical properties. U.S. Polymer Surfaces International warrants that its products, when properly installed by a state licensed waterproofing contractor according to U.S. Polymer Surfaces International guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by U.S. Polymer Surfaces International of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. U.S. Polymer Surfaces International shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. U.S. Polymer Surfaces International shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. U.S. Polymer Surfaces International reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

# Disclaimer:

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and U.S. Polymer Surfaces International makes no claim that these tests or any other tests, accurately represent all environments.

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