



Product Description

Enviro-Shield® 1005 is a waterborne UV-stable, aliphatic polyurethane topcoat / sealer coat. This waterborne coating has been specially formulated as a durable, color-stable, abrasion resistant topcoat for wood and for re-sealing existing polyurethane/polyurea surfaces.

Enviro-Shield® 1005 possesses an excellent balance of tensile strength, flexibility, toughness and abrasion resistance. The flexibility built into the polymer structure allows the coating to move with the substrate in conditions of temperature. It can also be used as a top coating over polyurethane and epoxy seal coats and base membranes. For post-finish application, Crosslinker is required.

This product does meet VOC requirements for SCAQMD areas.

Features

- Excellent Color Retention
- Excellent Flexibility and Impact Resistance
- Excellent Weatherability
- UV Stable
- Waterborne

Typical Uses

- Concrete
- Plywood
- Heavy Pedestrian Traffic
- Vehicular Traffic
- Re-sealing Existing Polyurethane Surfaces

Packaging

1 gallon (3.78 liter) can
5 gallon (18.9 liter) pail
55 gallon drum, net fill 50 gallons (189 liters)

Color

White, Black and Clear with Matte and Gloss Finish.

Custom colors are also available. Minimum order of 250 gallons (945 liters). See color chart for special provisions.

Coverage

The approximate coverage is 1 gallon/520 sqft. Coverage rate will depend on surface roughness and porosity.

Surface Preparation

When used as a top coat over polyurethane or epoxy coatings, the following apply: Epoxy coating must be top coated within 24 hours of initial application. Surface must be clean and free of all contamination and possible exudation – which can occur when epoxies are cured in cool or damp conditions. Polyurethane coatings can be top coated as soon as the base is cured enough to walk on. If kept clean and covered, the polyurethane base can be topcoated any time within 4 hours after initial application.

Mixing

Power mix to smooth homogenous consistency.

Technical Data (Based on Draw Down Film)

Tear Strength, Die C, ASTM D624 400 ± 50 pli
70.1 ± 8.8 kNm

Tensile Strength, ASTM D412 4200 ± 300 psi
28.9 ± 2.1 MPa

Ultimate Elongation, ASTM D412 300% ± 50

**Volatile Organic Compounds
ASTM D2369-81** 1.02

Total Solids by Weight, ASTM D2369 37 ± 2%

Total Solids by Volume, ASTM D2697 35 ± 2%

Viscosity at 24°C (75°F) 60 ± 10 KU

**Volatile Organic Compounds
ASTM D2369-81** 0.375 lb/gal
45 gm/liter

**Mix Ratio For Post Finish Application
(Enviroshield 1005 to Crosslinker)** 20:1 by volume

% Gloss at 15.5°C (60°F), ASTM D2457 15% ± 3 Matte
80% ± 5 Gloss

Pencil Hardness 1 H

**Resistance to Weathering, ASTM G23
(Type QUV Weatherometer-2000 hrs
exposure)** No cracking or blistering.
Color change, gloss
reduction & chalking are
noted.

Note: Above physicals are from lab drawn films. Actual spray physicals may vary.

For post-finish application, add Crosslinker (at a ratio of 20 parts Enviro-Shield® 1005 to 1 part Crosslinker or 1 gal : 6.4 oz.) and power mix for an additional 5 minutes.


Note: Mix only amount of material that can be used in 1 hour. Do not mix in an up and down motion. Do not mix any material that cannot be used within 45 minutes.

Application

Apply to surfaces at temperatures between 60°F and 170°F (15 and 77°C)

For surface temperatures outside of these parameters consult Polycoat Products technical service.

Allow the Sealer to dry between coats depending upon heat and humidity. Allow 24 hours for light traffic and 48 hours for heavy traffic, roller, high pressure spray, or through a cup gun under low pressure.



Enviro-Shield® 1005 is dispersed in water, and therefore can be thinned by slowly adding purified water with thorough mixing.

Only minor thinning should ever be needed. Thinning will increase the drying and curing time. Equipment can be cleaned with soapy water before the coating dries. If the coating is left to dry it is very difficult to remove.

Storage

Enviro-Shield® 1005 has a shelf life of 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

Surfaces must be dry, clean and free of foreign matter.

For Application, surface temperature must be above 60°F (15°C).

Surface may be slippery when wet.

Containers that have been opened must be used as soon as possible.

Warning

This product contains Isocyanates and Solvent.

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