



**POLYCOAT  
PRODUCTS**  
A Division of American Polymers Corp.

**ENVIRO-SHIELD® 1000**  
*Waterborne Aliphatic Urethane  
Polyurea Sealer Coat*

**DESCRIPTION**

Enviro-Shield® 1000 is a waterborne U.V.-stable, aliphatic polyurethane topcoat / sealer coat. This waterborne coating has been specially formulated as a durable, color-stable, abrasion resistant topcoat for concrete, masonry, wood, and metal surfaces, and for re-sealing existing polyurethane/polyurea surfaces.

Enviro-Shield® 1000 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 extremes and where vibration and heavy floor traffic occur. It can also be used as a top coating over polyurethane and epoxy seal coats and base membranes.

This product does not meet VOC requirements for SCAQMD areas.

**FEATURES**

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

**TYPICAL USES**

- ❖Concrete
- ❖Plywood
- ❖Heavy Pedestrian Traffic
- ❖Vehicular Traffic
- ❖Some Types of Chemical Spills
- ❖Re-sealing Existing Polyurethane Surfaces
- ❖Most Metal, Rubber, Wood, or Masonry Surfaces

**COLORS**

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. Contact Polycoat Products for more information.

**PACKAGING**

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

**SURFACE PREPARATION**

All concrete surfaces must be sound and free from curing agents, mold release agents, latence and all other contamination. In a small area, test to see that Coating absorbs readily into the concrete surface. If the surface appears to be blocking the absorption of the Sealer, it is necessary to abrade the surface with a drum sander, disk sander or shot blaster to remove the top layer. Remove all abraded concrete powder, and insure that the surface is clean and dry. 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.

**TECHNICAL DATA**

Theoretical Coverage .....	520±10 sq.ft./gallon at 1 dry mil
Tear Resistance, Die C, ASTM D-624 .....	400 ± 50 pli
	70.1 ± 8.8 kNm
Tensile Strength, ASTM D-412 .....	4000 ± 300 psi
	27.5 ± 2.1 MPa
Ultimate Elongation, ASTM D-412 .....	150% ± 25
Specific Gravity .....	1.02
Total Solids by Weight, ASTM D-2369 .....	35 ± 2%
Total Solids by Volume, ASTM D-2697 .....	32 ± 2%
Viscosity at 24°C (75°F) .....	60 ± 10 KU
Volatile Organic Compounds	
ASTM D-2369-81 .....	1.64 lb/gal
	197 gm/liter
% Gloss at 15.5°C (60°F), ASTM D-2457 .....	15% ± 3
Pencil Hardness .....	H

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

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 one week after initial application.

**APPLICATION INSTRUCTION**

Apply to surfaces at temperatures between 60° and 85°F. For surface temperatures outside of these parameters consult Polycoat Products technical service.

Allow the Sealer to dry for a minimum of 1 hour between coats depending upon heat and humidity. Allow 24 hours for light traffic and 48 hours for heavy traffic.

**HANDLING AND STORAGE**

Enviro-Shield® 1000 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.

Enviro-Shield® 1000 is not freeze/thaw stable, ie, do not allow to freeze.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets(MSDS) before applying material.

## STORAGE

Enviro-Shield® 1000 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers. For best shelf life store it between 40°F and 100°F.

## LIMITATIONS

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

For Application, surface temperature must be above 60°F.

Surface may be slippery when wet.

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

Do not dilute under any circumstance.

The following conditions must not be coated with Polycoat Products deck coating systems or products: on below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, lightweight concrete, asphalt surfaces and asphalt overlays.

## WARNING

This product contains Isocyanates and Solvent.

Refer to MSDS for all safety information.

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### LIMITED WARRANTY

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products 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 Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products 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. Polycoat Products 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. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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