

POLY-THANE #1

DESCRIPTION

POLY-THANE #1 is a clear, two-component, aromatic polyester-urethane performance topcoat. It is designed to provide the best possible protection against very aggressive solvents, acids, water, alcohol, salt solutions, etc. It is specifically recommended to be used as the final 1-2 topcoats on epoxy flooring systems. When the resin and hardener are properly measured (1:1 ratio) and mixed thoroughly, an extremely dense chemical cross-linking action occurs. This special cross-linking of the two components produces a coating that provides corrosion resistance equal to or better than high quality heat-cured systems, and better than ambient temperature cured epoxy or urethane for most solvents.

BENEFITS

- Easy to Use Mix Ratio
- Maximum Chemical Resistance
- Maximum Stain Resistance
- Easy Maintenance

COLORS

POLY-THANE #1 is tinted with ADD-A-COLOR #4 and is available in 15 standard colors. Please refer to the Standard Color Chart on our website. Custom colors are available upon request.

TYPICAL USES

- Protective Top Coat for Epoxy Floors
- Chemical Storage Areas and Warehouses
- Laboratories
- Solvent Use Areas
- Battery Acid Use Areas

SURFACE PREPARATION

This product requires preparation in order to perform as expected. Substrate must be profiled, clean, sound, and dry. Substrate must be primed with DUR-A-SHIELD, DUR-A-POXY HIGH GLOSS, or DUR-A-GLAZE TIE-COAT. Please refer to the master "Surface Preparation Guide" for more information.

APPLICATION METHOD/SPREAD RATE

POLY-THANE #1 is typically applied with a mohair roller at 300 Sq Ft per gallon.

LIMITATIONS

This product is best suited for application in temperatures between 55°F and 90°F. Substrate must be clean, sound, and dry. Ignition sources, sparks and open flame must be avoided during application—especially in confined areas. POLY-THANE #1 is highly flammable in its liquid state. Moving air with proper exhaust ventilation is necessary in most instances.

POLY-THANE #1 can amber when exposed to UV radiated by sunlight, some high intensity warehouse lighting systems and fluorescent lights. Corrosion resistance is not affected.

PACKAGING

POLY-THANE #1 is available in ½-gallon and 1-gallon cans, 5-gallon pails, and 50-gallon drums.

CHEMICAL RESISTANCE

This product is resistant to many common chemicals. Please refer to the master Chemical Resistance Chart on our website for actual resistance to specific chemicals/reagents.

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TECHNICAL INFORMATION

Mix Ratio, by Volume	1:1
Pot Life 72°F, (parts combined)	3 - 4 hours
Working Time on Floor 72° F	15-20 minutes
Shelf Life, 72°F	1 year in unopened containers
Color	Clear
Viscosity	150 cps at 72°F
Drying Properties, 72°F, 50% R.H	Touch Dry - 1.5 hrs.
8 mil wet film	Recoat - 3-4 hrs.
Hard Dry	8-10 hrs.
Chemical Resistance	5 - 7 days
Flash-point, Closed Cup Test	110°F

Physical Property	Test Method	Result
60 Gloss	ASTM D-523	90+
Impact Resistance	ASTM D-2794	>160 in. – lb.
Solids by volume		55+/-1
Adhesion	ASTM D-4541	550 psi
Hardness	ASTM D-3363 ASTM D-2134	4H 40+
QUV	UVB-373/1500hrs	10%
Flame Spread / NFPA-101	ASTM E-84	Class A
Flexibility (1/4: Cylindrical mandrel)	ASTM D-1737	Pass
Elongation	ASTM D-2370	7%
Tensile Strength	ASTM D-2370	7,500 psi
Coefficient of Friction	ASTM D-2047	>0.6
Abrasion Resistance	ASTM D-4060	
CS17 wheel (1000g load) 1000 Cycles		14 mg loss
VOC Content		534.8 g/l

MOISTURE CONCERNS

Please refer to the Floor Evaluation Flow Chart in the Contractor's Center of our website for a step-by-step process to determine the condition of the concrete.

CLEANING

This product is considered to be a low maintenance flooring solution, however, certain textures and service environments require specific procedures. Please refer to the master Cleaning Guide on our website..

CAUTION

Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. KEEP OUT OF REACH OF CHILDREN.

JOINT GUIDELINES

Refer to the Joint Guidelines for complete details on our website.

Before using any DUR-A-FLEX, Inc. product, be sure the Material Safety Data Sheet is read and understood.