



550 POLYURETHANE ENAMEL



PRODUCT INFORMATION BULLETIN

DESCRIPTION Envirothane® 550 is an economical two component spray applied high performance high gloss aliphatic acrylic polyurethane spray applied coating.

TYPICAL USE Designed for industrial use where a high performance polyurethane with excellent long term color and gloss retention is required for industrial plants, pulp and paper mills, textile mills, chemical plants, water and wastewater plants, refineries, processing plants, pharmaceutical plants, commercial buildings, and marine structures. Use as a finish coat over Enviroline 202 Epoxy Primer.

BENEFITS

- Excellent gloss and color retention
- User friendly
- Long pot life
- Excellent chemical and abrasion resistance
- Early moisture resistance (6 hours @ 77° F)
- Fast dry

LIMITATIONS OF USE Not recommended for roller application. Do not apply outside if rain is likely before product can develop early moisture resistance. Consult your Envirothane representative for more details.

TECHNICAL DATA

Weight (lbs/gal): 9.5
Volume Solids: 43 ± 1 %
Pot Life (@77° F): 6 hours
Color(s): Assorted (see below)
Pencil Hardness (ASTM D 3363): H

VOC (mixed lbs/gal): 4.11
VOC (mixed g/l): 493
Recommended Thickness: 2.0 mils DFT per coat
Flash Point: Part A - 80°F, Part B - 69°F

Temperature Resistance:
Non-Immersion, Dry Heat: 250° F (121° C)

COVERAGE **Theoretical Coverage*:** 678 sq. ft per gallon @ 1 mil dry
@ 2 mils: 339 sq. ft. per gallon

**When ordering product, make allowances for any loss due to surface irregularities, etc. (approx. 15 – 20%).*

DRY & CURE SCHEDULE Drying schedule at temperatures indicated and 50% relative humidity:

	55°F	77°F	100°F
Touch Dry	30 minutes	15 minutes	5 minutes
Dry Hard	2.5 hours	2 hours	15 minutes
Dry Thru	24 hours	5 hours	35 minutes
Minimum Recoat	12 hours	6 hours	5 hours
Maximum Recoat	5 days	2 days	24 hours
Cure	7 days	3 days	36 hours

VENTILATION Adequate ventilation is required during application and curing process.

SURFACE PREPARATION All surfaces must be clean and dry, free of dust, dirt, oil and other foreign matter. Primer coat should be smooth and free of surface defects for optimum finish appearance.

Steel: Clean and prime with Enviroline® 202 Epoxy Primer. Refer to Enviroline 202 Product Information bulleting for more details regarding surface preparation recommendations.

Fiberglass: Solvent wipe, scuff sand and solvent wipe again. Prime with Enviroline 202 Epoxy Primer.

Concrete: Acid etch or abrasive blast to remove laitance and loose concrete. Patch repair concrete where necessary. Apply Enviroline 50, 54, or 57X Primer/Sealer and Enviroline 202 Epoxy Primer as an intermediate coat to reduce outgassing and produce a smoother finish appearance.

Galvanized Steel and Aluminum: Allow galvanized steel to weather 6 months prior to coating. Remove all dirt, grease, oil, etc. with detergent cleaning followed by thorough water rinsing. Allow surface to dry and then prime with Enviroline 202.

COLORS Available in White, Gray, Aluminum, Safety Colors, and Tint Bases. Refer to the Enviroline Color Selector Guide for additional colors available. Custom color matching is also available upon request with an acceptable dry color reference standard.

TINTING Tint Bases are used with the Industrial Tinting System to provide selected colors and custom color matching and may be short filled to allow for colorant addition. Special colors may require more than one coat for complete hiding. Actual coverage will depend on the amount of colorant added and final finish color and should be taken into consideration when ordering.

APPLICATION EQUIPMENT **Spray:** Product is designed for spray application. For airless spray application, a minimum 30:1 ratio pump, a .011" - .013" spray tip, and 3/8" ID hose is recommended. For conventional spray application, use a DeVilbiss MBC-510 Gun with "E" tip and 30 air cap or equivalent. Use 40-45 psi atomizing pressure and 8-10 psi pot pressure, 3/8" ID hose, and a double regulated pressure pot with oil and moisture separator.

Brush: Acceptable for touch up and small repair areas only. Use a high quality bristle brush.

Roller: Roller application is not recommended

Note: During any extended periods of work stoppage material should be flushed from hoses and equipment. Release pressure from equipment and flush hoses and equipment with MIBK.

MIX RATIO 4:1 by volume.

APPLICATION CONDITIONS Apply at 5° F (3° C) above dew point. Use the following chart for preferred temperature and humidity conditions. These conditions plus adequate ventilation must be maintained throughout the curing cycle.

	Coating	Substrate	Ambient	Humidity
Preferred	70-100°F	70-100°F	70-100°F	N/A
Minimum	55°F	55°F	55°F	< 90%

HANDLING Store at moderate temperatures (70-100° F) prior to application for ease of handling and mixing.

THINNING Not required.

MIXING **Envirothane® 550** is a two-component product supplied in one or five gallon kits. The entire contents of each container must be mixed together. It is important that all mixing and spray equipment be free of water and moisture to avoid contaminating the coating. Mix the base portion to obtain a smooth, homogeneous condition. Then add the converter slowly with continued agitation. Pot life of the mixed material is 6 hours at 77°F. Higher temperatures will reduce working life of the coating; lower temperatures will increase it.

Induction of material after mixing and prior to application can improve early water resistance and also reduce potential gassing from reaction with moisture in the air, especially when applying at cooler temperatures and/or high humidity conditions. Use the following chart for recommended induction times according to ambient temperature and humidity conditions:

	55° F	77° F	100° F
Induction time	30 minutes	Not required	Not required

CLEAN UP Clean immediately with methyl isobutyl ketone (MIBK).

PACKAGING Available in one and five gallon kits.

SHELF LIFE 2 years minimum when in protected storage at 40-100°F unopened.

SHIPPING F.O.B. Pompano Beach, Florida for domestic shipments, Ex-Works Pompano Beach for international shipments.

SAFETY This product is for industrial use only and should be installed by qualified coating and lining specialists. Consult Material Safety Data Sheets for important health and safety information prior to use.

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**Enviroline continuously strives to improve its data sheets for the benefit of all users. The owner/applicator is responsible for obtaining the most recent Product Information Bulletin prior to the purchase or application of material.*