



SINGLE COMPONENT RECOATABLE POLYURETHANE FINISH

Features

- Resistant to mild acids, alkalis and fuel
- Outstanding UV and weather protection
- High chemical and abrasion resistance
- Suitable for exterior environments
- Excellent anti-corrosion coating

General Description

Al Khaleej Polyurethane Finish is a multi-use, single-component isocyanate cured urethane appropriate for use on both metal and masonry. This product provides excellent gloss and color retention when used on exterior surfaces exposed to sunlight and rain, and the highly cross-linked formula provides superior abrasion, chemical, and solvent resistance. Due to these outstanding features, urethanes are often used as the final layer in a multi-layer system on steel or masonry.

This is a single component product. Do not mix with any other product. Thinning may be done with Al Khaleej Thinner for PU Finish.

Recommended for

Properly Prepared and Primed Steel, Iron, Non-Ferrous, Concrete, and Fiberglass. Ideal for Food and Beverage Processing, Industrial Maintenance, Paper and Pulp Processing, Transportation, Industrial Flooring, General Metal Finishing / Fabrication, Chemical Processing, Commercial Structures, Tank Exteriors and other areas requiring a long-life protective coating.

Limitations

- This product is not recommended for surfaces that require immersion
- Do not apply if ambient temperature is within 3°C of dew point

TECHNICAL DATA

Generic Type	Isocyanate Cured Polyurethane	Dries by	Chemical Cure
Pigment Type	Titanium Dioxide	Dry Heat Resistance	230 °F (110°C)
Volume Solids	72% ± 1.0% (when mixed as recommended)	Finish	Available in Gloss and Eggshell
Coverage per Gallon	350 – 400 Sq. Ft.at Recommended DFT	Surface Temperature at Application	Min. 15°C
Recommended Film Thickness	Wet: 75 ± 5 microns		Max. 35°C
	Dry: 60 ± 5 microns	Thinner	Surface must be dry and at least 3°C above the dew point Guardian Thinner for PU Finish
Drying Time @ 30°C	To Touch: 2 to 3 Hours	Pot Life	6 Hours @ 77 °F (25 °C)
	To Recoat: 16 to 24 Hours	Storage Temperature	Min. 15°C
	Full Cure: 72 Hours		Max. 32°C
		Recommended Primers	Guardian Epoxy Zinc Phosphite Primer Guardian Epoxy Zinc Rich Primer

TWO COMPONENT RECOATABLE POLYURETHANE FINISH

Surface Preparation

The performance of this product is directly dependent upon the degree of surface preparation employed. Rust and mill scale must be removed from carbon steel and iron substrates as outlined on specific primer data sheets. Surface to be coated must be clean, sound and dry. Fresh concrete must age at least thirty days before coating. All oil, grease, release agents, curing compounds, concrete hardeners and other contaminants must be removed before coating

NEW SURFACES

Steel: Blast selection and choice of primer will be dependent on the severity of exposure and degree of protection required. For best results, one coat of Guardian Micaceous Iron Oxide Epoxy Intermediate is recommended after application of a suitable Epoxy Primer.

Concrete: All masonry surfaces must be allowed to cure a minimum of 30 days before painting. Prime concrete with 1 coat Guardian Clear Epoxy Pre-Primer followed by 1 coat of Guardian Polyamide Epoxy and a topcoat of Guardian Two Component Polyurethane.

Galvanized and Non-Ferrous Metals: Solvent clean all surfaces. Apply 1 coat of Guardian Etch Primer to improve adhesion.

Fiberglass: Can be applied directly to clean, previously unpainted fiberglass. Scuff sand fiberglass to promote better adhesion.

Previously Painted Surface: Can be applied over old thermoset finishes in good condition. Test patches are recommended to check for wrinkling or lifting of existing coatings. If lifting occurs, Guardian Clear Epoxy Pre-Primer may be used over all existing coatings as a barrier coat.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.

Application

This is a single component product. Mix the contents thoroughly before application. The use of a drill mixer at low speed will best accomplish this task. Allow 15 minutes induction time (at 25°C) prior to applying the mixed product to the substrate. Do not apply if air or surface temperatures are below 10°C or relative humidity levels are greater than 85%, or if surface or air temperatures are within 3 degrees of the dew point. Product should be allowed to dry tack free prior to air or surface temperatures being within 5 degrees of the dew point.

Airless Spray: Tip range between .013 and .017. Total fluid output pressure at tip should not be less than 2400 psi.

NOTE: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with recommended thinner. If material begins gelling, immediately flush equipment as product has reached pot life.

CHEMICAL RESISTANCE GUIDE (NON-IMMERSION)

Fresh Water	Excellent
Salt Water	Excellent
Acids	Excellent
Alkalis	Excellent
Solvents	Excellent
Fuel	Excellent
Acidic Salt Solutions	Excellent
Alkaline Salt Solutions	Excellent
Neutral Salt Solutions	Excellent

Recommended Systems

For Blasted Metals	1st Coat: Guardian Epoxy Zinc Phosphate Primer
	2nd Coat: Guardian Epoxy Intermediate
	3rd Coat: Guardian Polyurethane Finish
For Galvanized Metals	1st Coat: Guardian Etch Primer
	2nd Coat: Guardian Epoxy Zinc Phosphate Primer
	3rd Coat: Guardian Intermediate coat or Polyurethane Finish Coat
For Aged Coatings	Use Direct or use Guardian Clear Epoxy Pre-Primer as a barrier coat

**KEEP OUT OF REACH OF CHILDREN
FOR PROFESSIONAL USE ONLY**