



ESGARD

**PERMAGARD 202
ALL SEASON ALUMINUM EPOXY MASTIC
(FORMERLY ULTRAGARD 202)**

DESCRIPTION

PermaGard 202 is a rust-inhibitive modified aluminum epoxy mastic for year round application. This premium quality, V.O.C. compliant, self-priming epoxy coating exhibits excellent penetration and adhesion to rusted surfaces, aged galvanized steel, and most existing paint systems. Suitable for use as a primer or intermediate coat, it provides the ultimate protection in the most adverse application conditions. Product advantages include:

- | | |
|--|---|
| 1. Excellent elevated temperature pot life | 8. Hard, tough film |
| 2. Low temperature cure | 9. Long term flexibility |
| 3. Urethane free | 10. Minimal surface preparation |
| 4. Rust inhibitive | 11. Self-priming |
| 5. Low V.O.C. | 12. Excellent application Characteristics |
| 6. Lead and chromate free | 13. Excellent film build on edges, etc. |
| 7. 1:1 mixing ratio | |

FIELD OF APPLICATION

PermaGard 202 is ideal for maintenance painting old rusted surfaces for upgrading old coatings in climates of hot and cold temperature extremes. It is particularly useful for application to metal where surface preparation is limited to hand tool or power tool cleaning. It is also suitable for use as a high build intermediate coat in aggressive industrial environments. Product applications include:

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|-----------------------------------|-------------------------|
| 1. Offshore structures | 5. Marine vessels |
| 2. Drilling rigs | 6. Pulp and paper mills |
| 3. Storage tanks and pipelines | 7. Heavy equipment |
| 4. Refineries and chemical plants | 8. Industrial machinery |

SERVICE CONDITIONS

PermaGard 202 will withstand continuous dry heat of 250°F (121°C) and intermittent dry heat of 300°F (149°C). The color may change as these limits are approached, but the film will remain intact. For immersion in fresh or salt water, the continuous temperature should not exceed 150°F (66°C). Do not use for potable water. PermaGard 202 exhibits broad resistance to aggressive chemicals and severe marine environments. It is not immersion service in acids, alkalis or solvents. Typical chemical resistance is as follows:

<u>Exposure</u>	<u>Immersion</u>	<u>Splash & Spill</u>	<u>Fumes</u>
Acids	NR	Very Good	Excellent
Alkalies	NR	Very Good	Excellent
Solvents	NR	Excellent	Excellent
Salt Water	Excellent *	Excellent	Excellent
Water	Excellent *	Excellent	Excellent

* Discolors to gray

Manufacturers of Quality Paints and Protective Coatings
Esgard, Inc. 515 Debonnaire Road Scott, Louisiana 70583 U.S.A.
(337)234-6327 Fax (337) 234-0113 1-800-888-2511

www.esgard.com



TECHNICAL DATA

TYPE Rust-inhibitive aluminum-filled modified epoxy

VOLUME SOLIDS 74%

V.O.C. As Supplied: 2.08 lb/gal (250 g/l)
Thinned 10%: 2.57 lb/gal (309 g/l)

DENSITY 12.2 lbs/gal mixed (1.46 kg/l)

COVERAGE (Theoretical) 1187 sq ft/gal at 1 mil dry (1.4 mils wet)
29.2 sq m/l at 25 microns dry (35 microns wet)

238 sq ft/gal at 5 mils dry (6.9 mils wet)
5.8 sq m/l at 125 microns dry (175 microns wet)

NOTE: When figuring practical coverage, allow for application losses, surface irregularities, any solvent addition, etc.

RECOMMENDED DRY FILM THICKNESS
Minimum: 4.0 mils (100 microns)
Typical: 7.0 mils (175 microns)
Maximum: 10.0 mils (250 microns)

DRY TIME (HOURS) @ 5 MILS DFT 65% R.H		Set To Touch	To Handle	Recoat	Topcoat	Immersion Service (Final Cure)
20°F (-7°C)		22	30	30	30	28 Days
40°F (4°C)		10	24	24	24	21 Days
60°F (16°C)		6	14	12	12	14 Days
70°F (21°C)		4	8	6	6	10 Days
80°F (27°C)		3	6	4	4	7 Days
100°F (38°C)		2	4	2	2	5 Days

SURFACE PREPARATION

Thoroughly clean any oil or grease contaminated areas with Esgard Surface Conditioner or a detergent wash followed by a fresh water rinse and allow drying in accordance with SSPC-SP1-82.

STEEL OR AGED GALVANIZING

NON-IMMERISION SERVICE -Remove all loose paint, dirt, rust and other surface contaminants via the most economical method:

Manual: SSPC-SP2-82 hand tool or SSPC-SP3-82 power tool surface or better.

Abrasive Blast: SSPC-SP7-82 brush off blast to SSPC-SP6-82 commercial blast or better.

UHP: SSPC-SP12 WJ-3/L or better.

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IMMERSION (WATER) SERVICE - Abrasive blast to SSPC-SP10-82 near white metal surface or better with an anchor profile of 2.0 - 3.0 mils (50 -75 microns) or UHP to SSPC-SP12 WJ-3/L or better.

APPLICATION

Existing Coatings - Compatible with most tightly adhering existing coatings when properly prepared. However, a test patch is always recommended to test compatibility.

Mix - Power mix components separately, then mix 1:1 by volume A:B. Mix complete Part A with complete Part B. Do not use partial kits. Allow to stand for 15 minutes to thoroughly mix and ingest. In cold weather the applied film will cure faster if the temperature of each component is above 60°F (15°C) at time of mixing.

Thin - Thin only as needed up to 10% (typically 5%) by volume to obtain proper consistency. For all spraying, brushing, and rolling use the following:

Above 80°F (27°C)	Esgard Thinner 106
Below 80°F (27°C)	Esgard Thinner 103

NOTE: The use of non-specified thinners may affect application characteristics and product performance.

Spray - Use suitable conventional or airless spray equipment. Flush equipment with Thinner 106 before use. The following has been found adequate:

Conventional - Pressure pot should have an oil/water trap, double regulators, and minimum 3/8" I.D. fluid and air hose. Gun should be a DeVilbiss with a (D) tip and # 64 air cap, or (E) tip and # 78 air cap, or Binks with # 66 or # 68 set up.

Airless - Use Graco Bulldog 30:1 or equal with Teflon packing with minimum 3/8" I.D. fluid hose. Gun should have a fluid tip size .419 - .423. Fluid tip pressure should be 1300 - 2600 psi.

Brush - Apply PermaGard 202 with a clean pure china bristle paint brush.

Roll - Apply PermaGard 202 with a quality short to medium nap roller with phenolic core. A solvent resistant foam roller provides an excellent finish.

POT LIFE (As Supplied)

<u>TEMPERATURE</u>	<u>HOURS</u>
20°F (-7°C)	24
40°F (5°C)	12
60°F (16°C)	8
80°F (27°C)	6
100°F (38°C)	3
125°F (52°C)	1.5

Pot life ends when viscosity changes and spraying and film build characteristics are impaired.

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CLEAN UP Esgard Thinner 103 or 106. For personal cleanup, use soap and water.

APPLICATION / SERVICE LIMITATIONS (TYPICAL)	Temperature and Humidity:		
		<u>MIN</u>	<u>MAX</u>
	Application (Ambient)	20°F (-7°C)	110°F (43°C)
	Application (Material)	20°F (-7°C)	110°F (43°C)
	Surface	20°F (-7°C)	145°F (63°C)
	Humidity	0%	97%
	Service		
	<u>Non-Immersion Dry</u>		
	Continuous	-	250°F (121°C)
	Intermittent	-	300°F (149°C)
<u>Immersion</u>			
Continuous	-	150°F (66°C)	
Storage	45°F (7°C)	100°F (38°C)	

This product simply requires application when the surface temperature is above the dew point. Condensation resulting from substrate temperatures below the dew point may cause flash rusting on prepared surfaces and interfere with adhesion. Special application techniques may be necessary above and/or below typical application conditions. NOTE: The applied film will cure faster if the temperature of each component is above 60°F (15°C) at time of mixing.

ORDERING INFORMATION

CONTACT # 1-800-888-2511

SHIPPING WEIGHT		<u>2 GAL KIT</u>	<u>10 GAL KIT</u>
	PermaGard 202	26.5 lb (12.0 kg)	132.0 lb (60.0 kg)
		<u>1 GAL</u>	<u>5 GAL</u>
	Thinner 103	8.5 lb (3.9 kg)	42.0 lb (19.0 kg)
	Thinner 106	8.5 lb (3.9 kg)	42.0 lb (19.0 kg)

FLASH POINT	PermaGard 202 – Part A	95°F (35°C)
	PermaGard 202 – Part B	95°F (35°C)
	Thinner 103	45°F (7°C)
	Thinner 106	105°F (41°C)

COLORS	Aluminum	(202 – A – 001)
	Red Tint Aluminum	(202 – AR – 001)

SHELF LIFE Thirty – six (36) months from date of shipment.

CAUTION **FOR INDUSTRIAL USE ONLY! FLAMMABLE!** Contains petroleum distillates. **DO NOT USE NEAR HEAT, SPARKS, OR FLAMES.** Close container after use.

SAFETY/FIRST AID Refer to Material Safety Data Sheet supplied with each order.

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