



ESGARD

**PERMAGARD 201
ALL SEASON EPOXY
(FORMERLY ULTRAGARD 201)**

DESCRIPTION

PermaGard 201 is an all season epoxy with uncommonly high resin content for use in hot and cold temperature extremes. This two component, low V.O.C. self-priming epoxy coating exhibits excellent film build, penetration and adhesion to rusted metal, aged galvanizing, most existing paint systems and damp (not ripping) surfaces. It is suitable for use as a primer, intermediate, and finish coat for protection in fresh or salt water immersion. Product advantages include:

- | | |
|----------------------------------|--|
| 1. User friendly | 8. Tolerates surface moisture during application |
| 2. Rust inhibitive | 9. Low temperature cure |
| 3. Low V.O.C. | 10. Excellent film build on edges, welds, etc. |
| 4. Lead and chromate free | 11. Excellent wetting in pitted areas |
| 5. 1:1 mixing ratio | 12. Hard, tough film |
| 6. Minimal surface preparation | 13. Long term flexibility |
| 7. Excellent film build on edges | 14. Excellent recoating properties |

FIELD OF APPLICATION

PermaGard 201 is ideal for use as a primer, intermediate, and finish coat in heavy duty industrial or marine environments when coating operations must take place all year round. It is particularly useful for application to metal where surface preparation is limited to hand tool or power tool cleaning. 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 CONDITION

PermaGard 201 will withstand continuous dry heat of 250°F (121°C) and intermittent dry heat to 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 temperatures should not exceed 150°F (66°C). Do not use for potable water. PermaGard 201 exhibits broad resistance to aggressive chemicals and severe marine environments. It is not recommended for exposure to strong acids, vigorous oxidizing solutions or immersion service in acids, alkalies 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

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.esgardcoatings.com



TECHNICAL DATA

TYPE Rust-inhibitive 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: 5.0 - 7.0 mils (125 -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: 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.

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

Damp Surfaces - Immediately prior to application, remove excess moisture with clean, dry rags or blow down with clean, dry compressed air. Apply liberal quantities by brushing vigorously to displace moisture or spray to recommended wet film thickness. Multiple coats are recommended.

APPLICATION

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 is above 60°F (15°C) at the 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 201 All Season Epoxy with a clean pure china bristle brush.

Roll – Apply PermaGard 201 All Season Epoxy with a quality short to medium nap roller with phenolic core. A solvent resistant foam roller provides an excellent finish.

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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

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

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)	110°F (43°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 201	26.5 lb (12.0 kg)	132.0 lb (60.0 kg)
SHIPPING WEIGHT		<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)

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FLASH POINT

PermaGard 201 – Part A	95°F (35°C)
PermaGard 201 – Part B	95°F (35°C)
Thinner 103	45°F (7°C)
Thinner 106	105°F (41°C)

COLORS

Primer Red	(201 – R – 001)
Buff	(201 – L – 001)
Gray	(201 – H – 001)
Other colors available upon request.	

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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