



ESGARD

PERMAGARD 214 ALL SEASON EPOXY

DESCRIPTION	<p>PermaGard 214 is an economical, general purpose epoxy coating that cures in cold temperatures allowing for year round coating operations. Suitable as a primer, intermediate, or finish coat, it is a high solids, V.O.C. compliant epoxy that cures to a tough, abrasion resistant film. Having been formulated for dry films in the range of 5.0 – 7.0 mils per coat, it also has excellent adhesion, recoating, and top coating properties. Product advantages include:</p> <ol style="list-style-type: none">1. Low temperature cure2. Excellent corrosion protection3. User friendly4. Low V.O.C.5. Excellent recoating properties6. 1:1 mixing ratio7. Lead and chromate free8. Long term flexibility9. Minimal surface preparation10. Economical
FIELD OF APPLICATION	<p>PermaGard 214 is ideal for use in light to heavy duty industrial and marine environments as a primer over properly prepared surfaces, and as an intermediate over organic or inorganic zinc primers, or as a finish coat where color/gloss retention is not critical. Product applications include:</p> <ol style="list-style-type: none">1. Offshore structures2. Marine vessels3. Drilling rigs4. Industrial machinery5. Storage tanks and pipelines6. Refineries and chemical plants
SERVICE CONDITIONS	<p>PermaGard 214 exhibits broad resistance to aggressive chemicals and severe marine environments. It is suitable for chemical contact exposure. PermaGard 214 will withstand continuous dry heat of 200°F (93°C) and intermittent dry heat to 250°F (121°C). The color may change as these limits are approached, but the film will remain intact. Do not use for potable water. For further information, see application/service limitations.</p>

TECHNICAL DATA

TYPE	Modified polyamine epoxy
VOLUME SOLIDS	72%
V.O.C.	As Supplied: 2.15 lb/gal (258 g/l) Thinned 10%: 2.62 lb/gal (314 g/l)
DENSITY	12.41 lbs/gal (1.49 kg/l)
COVERAGE (Theoretical)	1155sq ft/gal at 1 mil dry (1.4 mils wet) 28.4 sq m/l at 25 microns dry (35 microns wet) 231 sq ft/ gal at 5 mils dry (7.0 mils wet) 5.7 sq m/l at 125 microns dry (175 microns wet)

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

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RECOMMENDED	Minimum:	4.0 mils	(100 microns)
DRY FILM	Typical:	5.0 - 7.0 mils	(125 -175 microns)
THICKNESS	Maximum:	10.0 mils	(250 microns)
PER COAT			

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

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.

New and/or Failing Steel - 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 WJ3/L or better.

Existing Paint System - 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 WJ3/L or better.

NOTE: PermaGard 214 may be applied over most generic coatings when properly prepared. However, a test patch is always recommended to test compatibility.

APPLICATION

Mix – Power mix components separately, then mix 1:1 by volume A:B. Mix completely all of Part A with Part B. Do not use partial kits.

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 103 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 Binks with a #68 set up.

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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 .019 - .025. Fluid tip pressure should be 1300 - 2600 psi.

Brush – Apply PermaGard 214 with a clean pure china bristle paint brush.

Roll – Apply PermaGard 214 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

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%	90%
Service		
<u>Dry</u>		
Continuous	–	180°F (82°C)
Intermittent	–	250°F (121°C)
Storage	45°F (7°C)	100°F (38°C)

Note: DO NOT APPLY when the surface temperature is less than 5°F (3°C) above the dew point. Also, 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

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SHIPPING WEIGHT

	<u>2 GAL KIT</u>	<u>10 GAL KIT</u>
PermaGard 214	28.0 lb (12.0 kg)	136.0 lb (61.8 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 214 – Part A	95°F (35°C)
PermaGard 214 – Part B	95°F (35°C)
Thinner 103	45°F (7°C)
Thinner 106	105°F (41°C)

COLORS

Standard colors available. Custom colors on 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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