

The Multi-Gard GP (general purpose) products are formulated to protect steel substrates in a variety of service exposures typical of industrial OEM equipment destinations. The Multi-Gard line tends toward rapid cure to handle and re-coat to facilitate through-put in shop painting applications.

Selection & Specification Data

Generic Type	Phenalkamide Epoxy
Description	Corrosion and water resistant high performance, chemically cured, sandable epoxy coating. It can be used as a tie-coat over suitable prepared, aged epoxies and polyurethanes. Suitable for Industrial and Marine situations.
Features	<ul style="list-style-type: none"> • Excellent surfacing and sanding properties • Isocyanate free • Very good chemical resistance • Self-priming onto suitably prepared steel • Long pot-life
Gloss	Low sheen
Colour	Off White
Topcoats	Multi-Gard [®] GP 48 ^{AU} & GP 88 DTM ^{AU}
Dry Film Thickness	100-150*µm
Solids Content	45%
Theoretical Coverage Rate	100µm dry covers 4.5 sq. metres per litre 150µm dry covers 3 sq. metres per litre (<i>*applied in two passes</i>)
Mix Ratio	4:1 by volume
VOC Values	As supplied: 468g/L
Dry Temp. Resistance	121°C – maximum non-continuous
Induction Time	15 minutes
Limitations	May change colour and chalk when exposed to direct sunlight. This does not affect the protective properties of the coating.

Substrates & Surface Preparation

General	Remove any oil or grease from surface to be coated by the two rag method with clean rags soaked in Thinning Solvent #2.
Steel	Minimum abrasive blast to AS 1627.4 Class 2.
Previously Painted Surfaces	Lightly sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" adhesion test.

Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results. **General Guidelines:**

Conventional Spray	Pressure pot equipped with dual regulators, 9mm (3/8") I.D. minimum material hose, 1.2mm–1.8mm fluid tip and appropriate air cap.												
Airless Spray	<table> <tr> <td>Pump Ratio:</td> <td>30:1 (min.)*</td> </tr> <tr> <td>Output:</td> <td>10 lt/min (min.)</td> </tr> <tr> <td>Material Hose:</td> <td>9mm (3/8") I.D. (min.)</td> </tr> <tr> <td>Tip Size:</td> <td>0.015-0.019"</td> </tr> <tr> <td>Output PSI:</td> <td>2100-2400</td> </tr> <tr> <td>Filter Size:</td> <td>60 mesh</td> </tr> </table> <p>*Teflon packings are recommended and available from the pump manufacturer.</p>	Pump Ratio:	30:1 (min.)*	Output:	10 lt/min (min.)	Material Hose:	9mm (3/8") I.D. (min.)	Tip Size:	0.015-0.019"	Output PSI:	2100-2400	Filter Size:	60 mesh
Pump Ratio:	30:1 (min.)*												
Output:	10 lt/min (min.)												
Material Hose:	9mm (3/8") I.D. (min.)												
Tip Size:	0.015-0.019"												
Output PSI:	2100-2400												
Filter Size:	60 mesh												

Brush & Roller (General)	Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling.
-------------------------------------	---

In cooler temperatures (<20°), try to avoid thinning to assist in achieving film build. In warmer temperatures, thin judiciously with Thinning Solvent #22. Excess thinning will compromise build properties.

Multi-Gard® GP 33^{AU}

Mixing & Thinning

Mixing	Multi-Gard® GP 33 ^{AU} is a two component product supplied in 5 litre and 10 litre kits which contain the correct ratio of ingredients. Power mix Part A separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Ratio	4:1 by volume (Part A : Part B)
Thinning	Thinning requirement will vary depending upon conditions. Thin with Thinning Solvent #12 as required for good atomisation; typically no more than 10%
Pot Life	8 hours at 25°C

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	16°-24°C	18°-24°C	18°-24°C	30-70%
Minimum	10°C	10°C	10°C	0%
Maximum	32°C	50°C	50°C	95%

Industry standards are for substrate temperatures to be 3°C above the dew point.

Curing Schedule

Surface Temp. & 50% Relative Humidity	Dry to Recoat	Dry to Sand	Dry to Topcoat with GP ^{AU} 48	Max cure time to Topcoat (with sanding)
10°C	10 hours	24 hours	12 hours	8 days* Refer to notes below
15°C	8 hours	12 hours	10 hours	
25°C	6 hours	6 hours	6 hours	
30°C	5 hours	6 hours	6 hours	

***Notes:** Dry to sand times will increase with higher film builds, and/or lower temperatures.

Multi-Gard® GP 33^{AU} must be topcoated within 8 days of application. Any sanding should be carried out no more than 2 days before topcoating. If top coating is not achieved within 8 days then the Multi-Gard® GP 33^{AU} must be thoroughly sanded with a coarse grade sandpaper (80-180grit) and reapply a coat of Multi-Gard® GP 33^{AU}.

Sanding Guidelines

Hand sanding: Multi-Gard® GP 33^{AU} is normally hand sanded with 220 grit (for further undercoating), followed by 320 grit sandpaper prior to topcoating.

Orbital sanding: Up to 280 for finish coating with Multi-Gard® GP 48^{AU} or Multi-Gard® GP 88 DTM^{AU}.

We recommend 3M Free-Cut® Gold or Norton NoFil®, (or equivalent) Zinc Stearate, or Calcium Stearate sandpapers for optimised sanding and self-cleaning.

Attempting to orbital sand with 320 grit or finer will impair sanding properties and polish the surface.

Cleanup & Safety

Cleanup	Use Thinning Solvent #12 or #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.
Ventilation	When sprayed may be harmful by inhalation - do not breath vapour or spray. Wear suitable clothing, gloves, eye and face protection.

Packaging, Handling & Storage

Pack Sizes	5 litre and 10 litre kits
Flash Point (Setflash)	Multi-Gard® GP 33 ^{AU} Part A: 26°C Multi-Gard® GP 33 ^{AU} Part B: 26°C
Storage Temperature & Humidity	Store under cover in dry conditions. 4°-38°C 0-95% RH
Shelf Life	Part A: 24 months Part B: 24 months

***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers**



Supplied by:-
Resene Paints (Australia) Limited
7 Production Ave
Queensland 4214
Australia
Phone: +61 7 5512 6600

350 Hanley Industrial Court, St. Louis, MO 63144-1599
314/644-1000 314/644-4617 (fax) www.carboline.com

An **RPM** Company

Issued February 2018 replaces May 2016

Manufactured and / or distributed in Australia by Resene Paints (Australia) Limited under license to Carboline Company. To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Resene Paints (Australia) Limited to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY RESENE PAINTS (AUSTRALIA) LIMITED OR CARBOLINE EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Carboline® and Carboguard® are registered trademarks of Carboline Company.