

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type | Aliphatic acrylic polyurethane

Available in Australia only; Multi-Gard GP 48 is fast-dry polyurethane coating which provides a high gloss finish which has excellent corrosion, abrasion and chemical resistance.

Description

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 and commercial marine conditions. The Multi-Gard line tends toward rapid cure to handle and re-coat to facilitate through-put in shop painting applications.

- Direct-to-metal (when used with GP 88 Part B)
- · Fast dry and handle times
- · Excellent abrasion and chemical resistance

Features

- Excellent gloss and colour retention
- Suitable for OEM applications
- Excellent aged re-coatability when cleaned with Altex P40 Cleaner
- · Applied by air, or airless spray

Colour

Coral White, Black, Golden Yellow, New Cat Yellow #2, and tintable to an extensive range of Resene, RAL, British Standards and AS 2700 colours.

Gloss | High Gloss

Primer | Multi-Gard Etch, GP 22, GP 33, Carboguard epoxy coatings

Film Build | 50 - 75 microns dry per coat

Solid(s) Content | By volume 54%

Theoretical Coverage Rates

10.8 m²/litre at 50 microns dry 7.2 m²/litre at 75 microns dry

Allow for loss in mixing and application.

VOC Value(s) | As supplied: 453 g/l

Dry Temp. Resistance | Non-Continuous: 121°C (250°F)

SUBSTRATES & SURFACE PREPARATION

General

Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating. For all surfaces prime with specific Carboline primer as recommended by your Carboline sales representative. Refer to the specific primer's Product Data Sheet for detailed requirements of the specified primer.

Steel

Prime with specific Carboline primer as recommended by your Carboline Sales Representative. Refer to the specific primer's Product Data Sheet for substrate preparation requirements.

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.

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MIXING & THINNING

Mixing

Multi-Gard GP 48^{AU} is a two component product supplied in 5 litre and 10 litre kits which contain the correct ratio of ingredients. Power-mix the Part A first to obtain a smooth homogeneous condition. After mixing the Part A, slowly add the converter (Part B) whilst continuing to agitate at slow speed. After addition of the converter (Part B) is complete, continue to mix slowly until homogeneous. Low speed mixing is recommended to avoid aeration of the mix.

Thinning

Thin with Thinning Solvent #20 (standard) or for warmer conditions use Thinning Solvent #25 (slower) as required for good atomisation; typically between 5% - 20%.

Ratio | 4:1 by volume (Part A : Part B)

Pot Life

4 hours at 25°C and less at higher temps

MOISTURE CONTAMINATION WILL SHORTEN POT LIFE AND CAUSE GELLATION.

APPLICATION EQUIPMENT GUIDELINES

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.

Conventional Spray

Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 1.2mm – 1.6mm fluid tip and appropriate air cap

Airless Spray

Airless: Use a pump capable of supplying 3000psi fluid pressure. Spray tip: 0.015-0.019"

(General)

Brush & Roller | For small touch-up areas only.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	2°C (36°F)	2°C (36°F)	10%
Maximum	38°C (100°F)	49°C (120°F)	35°C (95°F)	80%
Optimum	22°C (72°F)	22°C (72°F)	22°C (72°F)	50%

Industry standards are for substrate temperatures to be 3°C above the dew point. Caution: This product is moisture sensitive in the liquid stage and until fully cured. Protect from high humidity, dew and direct moisture contact until fully cured. Application and / or curing in humidities above maximum, or exposure to moisture from rain or dew may result in a loss of gloss and/or micro-bubbling of the product.



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CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat	Final Cure
5°C (41°F)	30 Hours	24 Hours	10 Days
15°C (59°F)	16 Hours	12 Hours	5 Days
25°C (77°F)	6 Hours	4 Hours	4 Days
30°C (86°F)	5 Hours	4 Hours	3 Hours

These times are based on a 50 micron dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. **Maximum self-recoat times are indefinite.** Surface must be clean and dry. As part of good painting practice it is recommended to test for adhesion by wiping the surface with Thinner #25. If the film shows a slight "tack" the surface is suitable for recoating without extensive surface preparation such as abrading. Polyurethane Accelerator can be used to accelerate the film forming process in this product for conditions outside of the parameters of this data sheet. Polyurethane Accelerator is added at a rate of 5 ml per mixed litre or a maximum of 25 ml per mixed five litres. At this addition rate, Polyurethane Accelerator will accelerate the cure rate of the urethane product between 25-40% depending on the substrate temperature range and reduce the pot life of the product by approximately 40-50% of that stated on the product data sheet.

CLEANUP & SAFETY

Cleanup

Use Thinning Solvent #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

Contains isocyanate. When sprayed may be harmful by inhalation - do not breath vapour or spray. Wear suitable clothing, gloves, eye and face protection, including suitable breathing protection such as an air supplied respirator or hood.

PACKAGING, HANDLING & STORAGE

Packaging

5 litre & 10 litre kits

Multi-Gard GP 88 DTM Converter: 1 litre can for a 5 litre kit and 2 litre can for a 10 litre kit

Part A: 36 months at 24°C Part B: 12 months at 24°C

Shelf Life

Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers. For products/components exceeding the stated shelf life, contact Technical Services for further advice.

Services for further advice.

Storage Temperature & Humidity

4-40°C 0-80% RH

Store under cool dry conditions

Flash Point (Setaflash)

Part A: 25°C Part B: 38°C

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WARRANTY

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