

Selection & Specification Data

Generic Type	Aliphatic acrylic polyester polyurethane
Description	High build, low sheen finish that has excellent resistance to corrosion, chemicals and abrasion. Suitable for application over a number of Carboline primers and intermediates, this material provides very good weathering performance in a broad range of colours.
Features	<ul style="list-style-type: none"> - Outstanding performance properties in both mild and aggressive environments - High build; suitable for many two coat systems - Suitable for application direct to inorganic zincs - Application by spray, brush or roller - Indefinite recoatability - VOC compliant to current AIM regulations
Colour	Available in a variety of colours. Certain colours may require multiple coats to hide.
Finish	Satin
Primer	Refer to Substrates & Surface Preparation. Topcoat with Carbothane Clear Coat when required.
Dry Film Thickness	50 to 125µm per coat Apply 50µm over organic coatings or primers Apply 125µm over inorganic primers
	Dry film thickness in excess of 175 microns per coat is not recommended.
Solid Content	By Volume: 57% ± 2%
Theoretical Coverage	11,2m ² /litre at 50µm 7,5m ² /litre at 75µm 4,5m ² /litre at 125µm Allow for loss in mixing and application
VOC Values	As supplied 383 g/l Thinned 9% with Thinner # 25 420 g/l Thinned 14% with Thinner # 25 449 g/l
Dry Temp Resistance	Continuous 93°C Non-continuous 121°C Discolouration and loss of gloss is observed above 93°C
Limitations	The alignment of aluminium flakes in aluminium-filled finishes is very dependent on application conditions and techniques. Care must be taken to keep conditions as constant as possible to reduce variations in final appearance. It is also advisable to work from a single batch of material since variations can occur from batch to batch.

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. Refer to the specific primer's product data sheet for detailed requirements of the specified primer.
Steel	ISO 8501 Sa2 with a 40 to 60 micron surface profile for maximum protection. ISO 8501 St2 or St3 as minimum requirement. Prime with specific Carboline primers as recommended by your StonCor Africa sales representative.
Galvanised Steel	Prime with specific Carboline primers as recommended by your StonCor Africa sales representative. Refer to the specific primer's product data sheet for substrate preparation requirements.
Aluminium	SSPC-SP1 and prime with appropriate Carboline primer as recommended by your StonCor Africa sales representative.
Previously Painted Surfaces	Lightly sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3A rating in accordance with ASTM D3359 "X-Scribe" adhesion test. Prime with specific Carboline primers as recommended by your StonCor Africa sales representative.

Performance Data

Test Method	System	Results
Salt Fog (ASTM B117)	Blasted Steel 1 coat IOZ 1 coat C133HB	No rusting, or blistering on plane or scribe 2000 hours
Salt Fog (ASTM B117)	Blasted Steel 1 coat OZ 1 coat C133HB	No rusting or blistering on plane or scribe 4000 hours
Water Fog (ASTM D1735)	Blasted Steel 1 coat Epoxy 1 coat C133HB	No rusting or blistering after 8600 hours
Scrub Resistance (ASTM D4213)	1 coat C133HB	.0027 microlitres erosion rate after 100 cycles with abrasive scrub medium
Humidity (ASTM D4585)	Blasted Steel 1 coat IOZ 1 coat C133HB	No rusting or blistering after 3000 hours
QUV A Prohesion (ASTM D5894)	1 coat C133HB	No effect on plane area and 78% gloss retention after 1008 hours of wet/dry salt fog cycle
Weatherometer (ASTM G26)	Blasted steel 1 coat IOZ 1 coat C133HB	No blistering, rusting or cracking after 3500 hours
QUV (2500 hours w/UVA 340 bulb) (ASTM G53)	Blasted steel 1 coat Epoxy 1 coat C133HB	Colour change less than 2 McAdam units; no blistering, rusting, cracking or chalking
Graffiti Resistance	Blasted steel 1 coat epoxy 1 coat C133HB	All markings and stains removed by solvent after exposure to: shoe polish, Sharpie marker, crayon

Test reports and additional data available upon request.

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Carbothane® 133HB

Mixing & Thinning

Mixing	Power mix Part A separately, then combine with Part B and power mix. DO NOT MIX PARTIAL KITS
Thinning	Spray Up to 10% with Thinner # 25 Roller 5% up to 10% with Thinner # 25 Use of thinners other than those supplied or recommended by StonCor Africa may adversely affect product performance and void product warranty, whether expressed or implied.
Pot Life	4 Hours at 24°C and less at higher temperatures. Pot life ends when coating becomes too viscous to use. MOISTURE CONTAMINATION WILL SHORTEN POT LIFE AND CAUSE GELLATION.

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.

Conventional Spray	Pressure pot equipped with dual regulators 10mm I.D. minimum material hose 1.8mm nozzle fluid tip and appropriate air cap
Airless Spray	Pump Ratio 45:1 (min)* GPM Output 3.0 (min) Material Hose 10mm I.D. (min) Tip Size .013-.015" Output PSI 2100-2300 Filter Size 60 Mesh * Teflon packings are recommended and available from the pump manufacturer.
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. For best results, tie-in within 10 minutes at 24°C.
Brush	Recommended for touch-up only. Use a medium, natural bristle brush.
Roller	Use a medium nap synthetic roller cover with phenolic core.
Spray Application (General)	This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Minimum	4°C	4°C	4°C	0%
Maximum	38°C	43°C	43°C	90%

Industry standards are for substrate temperatures to be 3°C above the dew point. This product simply requires the substrate temperature to be above the dew point.

Caution: This product is moisture sensitive in the liquid stage and until cured. Protect from high humidity, dew and direct moisture contact until 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 & 50% Relative Humidity	Dry to Handle	Dry to Recoat	Final Cure
4°C	20 Hours	20 Hours	28 Days
10°C	12 Hours	12 Hours	14 Days
24°C	5 Hours	5 Hours	7 Days
32°C	1 Hour	1 Hour	4 Days

These times are based on a 75 to 125 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 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.

Cleanup & Safety

Cleanup	Use Thinner # 2. In case of spillage, dispose of in accordance with local applicable regulations.
Safety	Read and follow all caution statements on this product data sheet and on the MSDS for this product and use personal protective equipment as directed.
Ventilation	When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not able to monitor levels, use MSHA/NIOSH approved supplied air respirator.

Packaging, Handling & Storage

Shelf Life	Part A Min 36 months at 24°C Part B Min 24 months at 24°C Shelf life when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	Part A 5 Litre Part B 6.8kg Part B 1.0kg
Storage Temp & Humidity	4°C to 43°C 0-90% Relative Humidity
Flash Point (Setaflash)	Part A 35°C Part B 33°C Store indoors.

This product is solvent based and not affected by excursions below these published storage temperatures, down to -12°C for a duration of no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogenous when properly mixed.



Co. Reg. No.: 1996/01848/07
Tel No: +27 11 254 5500
Website: www.carboline.co.za
E-mail: carboline@carboline.com