

SELECTION & SPECIFICATION DATA

Generic Type	A two-component aliphatic acrylic polyurethane finish
Description	<p>Carbothane 156 SG is a semi gloss finish. Suitable for application over a number of epoxy primers and intermediates, and can be applied directly on galvanized steel. Carbothane 156 SG provides good weathering performance in a broad range of colours with a surface that is easy to keep clean.</p> <p>A finish coat for structural steel, exterior of steel tanks and piping, where good weatherability and a non-chalking finish is required. Recommended also for painting of machinery and transport equipment where a resistant and attractive coating is desired. Suitable directly on galvanized steel.</p>
Features	<ul style="list-style-type: none"> • Outstanding performance properties in both mild and aggressive environments • Excellent application properties • Applicable by spray, brush and roller • Suitable for application direct to galvanized steel • Indefinite recoatability
Color	Available in most RAL colours. Can be tinted by RTS Colour System. Certain colours may require multiple coats to hide.
Finish	Semi-Gloss
Primer	Refer to Substrates & Surface Preparation.
Wet Film Thickness	75 – 150 µm per coat.
Dry Film Thickness	40 - 80 microns (1.57 - 3.15 mils) per coat
Solid(s) Content	By volume: 56 ± 2%
Theoretical Coverage Rates	<p>14 m²/l at 40 microns dry film thickness.</p> <p>Allow for loss in mixing and application.</p>
Dry Temp. Resistance	<p>Continuous: 110°C (230°F)</p> <p>Non-Continuous: 130°C (266°F)</p> <p>Discoloration and loss of gloss may be observed above 110°C.</p>
Topcoats	Normally none, can be topcoated by it self.
Density	1.25 g/cm ³ depending on color

SUBSTRATES & SURFACE PREPARATION

General	Surface 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.
Steel	Prime with specific Carboline primers as recommended by your Carboline sales representative.
Galvanized Steel	Can be applied directly on galvanized steel. Sweep blast with mineral abrasives to an even roughness (SaS) or wash surface with Surface Cleaner No 3.
Previously Painted Surfaces	Oil, grease and salt are removed by appropriate means. Repair any damage to the primer coat. Note the overcoating time of the primer used.

Carbothane 156 SG

PRODUCT DATA SHEET



MIXING & THINNING

Mixing | Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

Thinning | Spray: Up to 20% with Thinner #25.
Roller: Up to 20% with Thinner #25
Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Ratio | 10 : 1 (A to B)

Pot Life | 3 hours at 20 °C and less at higher temperatures. Pot life ends when coating becomes too viscous to use. **This product is moisture sensitive. Avoid moisture contamination.**

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.

General | 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.

Airless Spray | Pump ratio: 30:1 (min.)
GMP Output: 3.0 (min.)
Material Hose: 3/8" I.D. (min.)
Tip Size: .011-.015"
Output bar: 140-180
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 rebrushing or re-rolling.

Brush | Recommended for touch-up only. Use a medium natural bristle brush.

Roller | Use a medium-nap synthetic roller cover with phenolic core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	0°C (32°F)	0°C (32°F)	0°C (32°F)	0%
Maximum	38°C (100°F)	43°C (109°F)	43°C (109°F)	80%

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 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 microbubbling of the product.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Handle	Minimum Recoat Time	Final Cure
0°C (32°F)	24 Hours	48 Hours	24 Hours	14 Days
10°C (50°F)	4 Hours	8 Hours	4 Hours	10 Days
20°C (68°F)	2 Hours	4 Hours	2 Hours	5 Days
35°C (95°F)	1 Hour	2 Hours	1 Hour	3 Days

These times are based on 40 microns dry film thickness. Higher film thickness or insufficient ventilation 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 surface shows a slight "tack" the surface is suitable for recoating without extensive surface preparation such as abrading.

CLEANUP & SAFETY

Cleanup	Use #2 Thinner 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 MSDS 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 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.
Caution	This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with applicable regulations. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: Min. 36 months at 24°C Part B: Min. 24 months at 24°C PS: The product reacts with moisture in the air. Use full kits or store fully sealed.
Storage Temperature & Humidity	5° - 45°C 0 - 90% relative humidity
Storage	Store indoors.
Packaging	Part A: 18 litres Part B: 1.8 litres

Carbothane 156 SG

PRODUCT DATA SHEET



WARRANTY

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 Carboline Company 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, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.