Carbothane® 134 GS

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Aliphatic Acrylic Polyurethane
Description	Carbothane 134 GS is an excellent weatherable finish for exterior exposures in industrial and marine environments. It has wide versatility as a high gloss aesthetically pleasing finish for a variety of exposures. It is an ideal topcoat over epoxy primers or intermediates to enhance appearance and longer term weathering characteristics.
Features	• Very good weathering (75% gloss retention after 4000 hours QUV-A exposure) • Exceeds SSPC-Paint Spec 36; Level 3 • 6 hours dry to handle time • High gloss appearance • Brush, roll, or spray application • Indefinite recoatability • Minimum 2 hours working time
Color	Custom colors (Rapid Tint Service)
Finish	High Gloss
Primer	Acceptable primers include Carboguard epoxies.
Dry Film Thickness	1.5 - 2 mils (38 - 51 microns) per coat
Solids Content	By Volume 55% +/- 2%
Theoretical Coverage Rate	882 ft²/gal at 1.0 mils (21.7 m²/l at 25 microns) 588 ft²/gal at 1.5 mils (14.4 m²/l at 38 microns) 441 ft²/gal at 2.0 mils (10.8 m²/l at 50 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 420 g/l These are nominal values and may vary slightly with color.
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)

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.
Steel	Prime with appropriate primers as recommended in section on “Primers”.

PERFORMANCE DATA

Test Method	System	Results
QUV-A	Carbothane 134 GS	Minimum 75% gloss retention after 4000 hours

MIXING & THINNING

Mixing	Power mix Part A separately, then combine with Part B and power mix. DO NOT MIX PARTIAL KITS.
Thinning	Thinning is not normally required. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.
Ratio	7:1 by volume (Part A to Part B)
Pot Life	4 Hours at 75°F (24°C) and less at higher temps. Pot life ends when coating becomes too viscous to use. 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.

Spray Application (General)	The following spray equipment has been found suitable and is available from equipment manufacturers.
Conventional Spray	Pressure pot equipped with dual regulators, 3/8” I.D. minimum material hose, .070” I.D. fluid tip and appropriate air cap.
Airless Spray	*Pump Ratio: 30:1 (min.) GPM Output: 3.0 (min.) Material Hose: 3/8” I.D. (min.) Tip Size: .015-.017” Output PSI: 1800-2200 Filter Size: Remove filters *PTFE 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 rerolling. For best results, tie-in within 10 minutes at 75°F (24°C).
Brush	Use a synthetic bristle brush.
Roller	Use a short-nap mohair roller cover with solvent resistant core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	100°F (38°C)	130°F (54°C)	110°F (43°C)	95%

Do not apply when the surface temperature is less than 3¿C (5¿F) above the dew point. Do not apply if temperatures are expected to drop below 10¿C (50¿F) within 24 hours of application. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat
60°F (16°C)	10 Hours	6 Hours
75°F (24°C)	6 Hours	3 Hours
90°F (32°C)	3 Hours	90 Minutes

These times are based on a 50 microns (2 mil) dry film thickness. Higher film thicknesses, insufficient ventilation, or cooler temperatures will require longer cure times. The material is typically ready to recoat when it passes a "dry to handle" test (thumb twist test).

PACKAGING, HANDLING & STORAGE

Shelf Life	Min. 24 months at 75°F (24°C) *Shelf Life: when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	40° -110°F (4°-43°C) 0-100% Relative Humidity
Storage	Store Indoors.

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.