

Selection & Specification Data

Generic Type	Aliphatic Polyurethane
Description	High gloss polyurethane finish for broad use on interior and exterior metal surfaces where a high gloss, easy-to-apply, economical coating is desired.
Features	<ul style="list-style-type: none"> ▪ High gloss ▪ Economical finish with pleasing appearance ▪ Spray, brush and roll ▪ Quick cure and handling ▪ VOC-compliant for most areas ▪ Meets SSPC Paint 36 specification for a Level 1 Urethane
Colors	Refer to Carboline Color Guide. Certain colors, particularly in non-lead safety oranges, reds and yellows may require multiple coats for adequate hiding. Check color suitability before use.
Finish	Gloss
Primers	Refer to <i>Substrates & Surface Preparation</i> .
Dry Film Thickness	2.0-3.0 mils (50-75 microns) Do not exceed 3.0 mils in a single coat
Solids Content	By Volume: 52% ± 2%
Theoretical Coverage Rate	834 mil ft ² (20.4 m ² /l at 25 microns) Allow for loss in mixing and application.
VOC Values	As supplied: 3.3 lbs./gal (400 g/l) Thinned: 13 oz. w/#221 3.6 lbs./gal (435 g/l) These are nominal values and may vary slightly with color.
Dry Temp. Resistance	Continuous: 180°F (82°C) Non-Continuous: 220°F (104°C) Discoloration and loss of gloss is observed above 180°F (82°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.
Steel	SSPC-SP6 with a 1.0-2.0 mil (25-50 micron) surface profile for maximum protection. SSPC-SP2 or SP3 as minimum requirement. Prime with specific Carboline primers as recommended by your Carboline Sales Representative.
Galvanized 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 surface and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" adhesion test. Prime with Carbocrylic 120 or others as recommended by your Carboline Sales Representative.

Carbothane® 134 SG

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:

Spray Application (General) The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional Spray Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .043" 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: .013-.017"
Output PSI: 2000-2200
Filter Size: 60 mesh
*Teflon packings are recommended and available from the pump manufacturer.

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

Brush Use a natural bristle brush.

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

Mixing & Thinning

Mixing Power mix part A separately, then combine and power mix. Do not mix partial kits.

Ratio by Volume 8:1

Thinning Spray: Up to 16 oz/gal (13%) w/#221
Brush: Up to 13 oz/gal (10%) w/#221
Roller: Up to 13 oz/gal (10%) w/#221
Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Pot Life 5 Hours at 75°F (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.

Cleanup & Safety

Cleanup Use Thinner #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 MSDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation and wear gloves or use protective cream on face and hands if hypersensitive. Keep container closed when not in use.

Caution This product contains flammable solvents. Keep away from sparks and open flames. In confined areas, workmen must wear appropriate respiratory protection. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

Cleanup & Safety Cont.

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 insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA / NIOSH approved supplied air respirator.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	60°-90°F (16°-32°C)	60°-90°F (16°-32°C)	60°-90°F (16°-32°C)	10-50%
Minimum	40°F (4°C)	40°F (4°C)	40°F (4°C)	5%
Maximum	110°F (43°C)	165°F (74°C)	100°F (38°C)	95%

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

Curing Schedule

Surface Temp. & 50% Relative Humidity	Dry to Touch	Dry to Topcoat	Dry Hard
50°F (10°C)	8 Hours	8 Hours	72 Hours
75°F (24°C)	1.5 Hours	4 Hours	48 Hours
90°F (32°C)	1 Hour	1.5 Hours	24 Hours

These times are based on a 2.0 mil (50 micron) dry film thickness. Higher film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times and could result in solvent entrapment or premature failure.

Packaging, Handling & Storage

Shipping Weight (Approximate)	<u>1 Gallon Kit</u> 12 lbs. (5 kg)	<u>5 Gallons Kit</u> 60 lbs. (27 kg)
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Flash Point (Setaflash) 95°F (35°C)

Storage (General) Store Indoors.

Storage Temperature & Humidity 40° - 110°F (4°-43°C)
0-100% Relative Humidity

Shelf Life Part A: 24 months at 75°F (24°C)
Part B: Min. 24 months at 75°F (24°C)

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



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