

SELECTION & SPECIFICATION DATA

Generic Type	Water-borne aliphatic acrylic polyurethane
Description	Thin film, high gloss finish with exceptional weathering performance characteristics. Used for the weathering protection of a variety of substrates in all architectural and industrial markets. It provides a smooth, durable finish that has excellent weathering resistance, gloss and color retention..
Features	<ul style="list-style-type: none"> • Water based, low VOC content • Excellent weatherability • Exceeds SSPC Paint 36 specification for a Level 3 urethane • Suitable for USDA inspected facilities • Available in most Carboline and custom colors • Excellent flow characteristics allow for application by spray or roller • Flexible, impact and abrasion resistant film • Indefinite recoatability • VOC compliant to current AIM regulations
Color	Refer to Carboline Color Guide. Certain colors may require multiple coats for adequate hiding. Check color suitability before use.
Finish	Gloss
Primer	Refer to Substrates & Surface Preparation.
Dry Film Thickness	2 - 2.5 mils (51 - 64 microns) per coat Excessive film thicknesses will cause micro-bubbling.
Solids Content	By Volume 50% +/- 2%
Theoretical Coverage Rate	802 ft ² /gal at 1.0 mils (19.7 m ² /l at 25 microns) 401 ft ² /gal at 2.0 mils (9.8 m ² /l at 50 microns) 321 ft ² /gal at 2.5 mils (7.9 m ² /l at 62 microns) Allow for loss in mixing and application.
VOC Values	<p>As Supplied : (EPA Method 24): 0.79 lbs/gal (95 g/l) As Supplied : 0.44 lbs/gal (53 g/l)</p> <p>Thinned: 9 oz/gal w/potable water: 0.79 lbs/gal (95 g/l) These are nominal values and may vary slightly with color.</p>
Dry Temp. Resistance	<p>Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)</p> <p>Discoloration and loss of gloss is observed above 200°F (93°C)</p>

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.
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Carbothane[®] 134 WB

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

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 and de-gloss the surface. Existing paint must attain a minimum 3A rating in accordance with ASTM D3359 "X-Scribe" adhesion test.

MIXING & THINNING

Mixing	Power mix Part A separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Thinning	Not normally required: Spray: Up to 9 oz/gal (7%) w/ potable water Brush: Up to 5 oz/gal (4%) w/ potable water Roller: Up to 5 oz/gal (4%) w/ potable water 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	5.25:1 Ratio (A to B)
Pot Life	1.5 Hours at 75°F (24°C) and less at higher temperatures. Pot life ends when coating becomes too viscous to use. Caution: Any unused, catalyzed material will "mushroom" and expand to twice its volume if left in the container.

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)	This is a thin-film, medium 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.
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: .013-.015" Output PSI: 2100-2400 Filter Size: 60 mesh *Teflon packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Thinning is not normally required. 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 5 minutes at 75°F (24°C).
Brush	Recommended for touch-up only. Use a medium, synthetic bristle brush.
Roller	Use a short woven-nap synthetic roller cover.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	10%
Maximum	100°F (38°C)	120°F (49°C)	110°F (43°C)	80%

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

Caution: 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 microbubbling of the product.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat	Final Cure General
50°F (10°C)	25 Hours	48 Hours	20 Days
75°F (24°C)	6 Hours	24 Hours	10 Days

These times are based on a 2.0 mil (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.

CLEANUP & SAFETY

Cleanup | Use potable water followed by a suitable solvent to dry equipment. 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 | 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 respirator.

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 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.

PACKAGING, HANDLING & STORAGE

Shelf Life | Part A: Min. 24 months at 75°F (24°C)
Part B: Min. 12 months at 75°F (24°C)
*When kept at recommended storage conditions and in original unopened containers.

Storage Temperature & Humidity | 40°-110°F (4°-43°C)
0-80% Relative Humidity

Storage | Store Indoors

Shipping Weight (Approximate) | 1 Gallon Kit - 13 lbs (5kg)
5 Gallon Kit - 60 lbs (27 kg)

Carbothane[®] 134 WB

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Flash Point (Setaflash) | Carbothane 134 WB Part A: 200°F (93°C)
Urethane Converter 134 Part B: 83°F (28°C)

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.