

# Carbocrylic<sup>®</sup> 3350

PRODUCT DATA SHEET

#### SELECTION & SPECIFICATION DATA

Generic Type

Waterborne Acrylic

# Description

Versatile coating with excellent performance properties. Frequently used in the bridge market as a finish coat over inorganic zinc primers, as well as a user-friendly finish for numerous other substrates. Various off-white colors such as S800 made with our rapid tint system or package colors may be used as a block-filler.

- · Excellent performance over inorganic zinc primers
- · Superior color and gloss retention

#### **Features**

- Single component
- · Spray, brush and roll
- · Low odor, low VOC
- Very good filling properties for masonry surfaces

Color

1864 (White), 2248 (Brown), C900 (Black), 0754 (Grey). Other colors are available on request. Contact your Carboline Representative for availability.

Satin to Semi-Gloss Finish

**Primer** 

Inorganic Zincs and others as recommended under Substrates & Surface Preparation. A mist coat may be required to minimize bubbling over Inorganic Zinc primers.

2 - 3 mils (51 - 76 microns) per coat

**Dry Film Thickness** 

Do not exceed 3.0 mils (75 microns) in a single coat.

Solids Content | By Volume 36% +/- 2%

**Theoretical Coverage** Rate 577 ft²/gal at 1.0 mils (14.2 m²/l at 25 microns) 289 ft²/gal at 2.0 mils (7.1 m²/l at 50 microns) 192 ft²/gal at 3.0 mils (4.7 m²/l at 75 microns)

Allow for loss in mixing and application.

**As Supplied**: 0.9 lbs/gal (119 g/l)

**VOC Values** 

EPA Method 24: 2.0 lbs/gal (250 g/l). (Calculated minus water and exempt solvent.)

These are nominal values and may vary slightly with color.

Dry Temp. Resistance

Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)

Slight discoloration and loss of gloss is observed above 200 F (93 C).

**Limitations** | Apply and cure at 50 °F (10 °C) and above for 24 hour period.

## 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.







#### SUBSTRATES & SURFACE PREPARATION

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.

When using under fireproofing products, defer to the primer surface preparation requirements in the product data sheet of the fireproofing product.

SSPC-SP1. Prime with Sanitile® 120 or others as recommended.

**Galvanized Steel** 

When using under fireproofing products, defer to the primer surface preparation requirements in the product data sheet of the fireproofing product.

Concrete must be cured 28 days at 75 °F (24 °C) and 50% relative humidity or equivalent. Laitance, form oils, curing agents and hardeners must be removed by suitable method prior to coating application.

Mortar joints should be thoroughly cured for a minimum of 15 days at 75 °F (24 °C) and 50% relative humidity or equivalent.

**Drywall & Plaster** Joint compound and plaster should be fully cured prior to coating application. Prime with Sanitile® 120.

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 Sanitile® 120.

**Wood** | Lightly sand with fine sandpaper and remove dust: Prime with Sanitile 120.

## PERFORMANCE DATA

# All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	System	Results	
ASTM D4213 Scrub Resistance	1 ct 3350	0.0384/0.0138 Microliters per 100 cycles Wet/Dry Film Volume	
ASTM D4541 Adhesion	Blasted Steel 1 ct. IOZ 1 ct. 3350	500-600 psi (Elcometer)	
Midwest Weathering	Blasted Steel 1 ct. IOZ 1 ct. 3350	No effect on plane area after 24 months exposure	

Test reports and additional data available upon written request.

# MIXING & THINNING

**Mixing** Power mix until uniform in consistency. Avoid excessive air entrapment.

May be thinned up to 6 oz/gal (5%) with clean, 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.

Block Filler Use When used as a block-filler apply first coat (roller preferred) and squeegee flush the surface. If needed, apply second coat. Number of coats will depend on porosity and roughness of surface and desired final appearance.



## **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 manufacturers.

**Conventional Spray** 

Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.043" I.D. fluid tip and appropriate air cap.

Pump Ratio: 30:1 (min.)\* GPM Output: 3.0 (min.) Material Hose: 3/8" I.D. (min.)

**Airless Spray** 

Tip Size: 0.015-0.019" Output PSI: 1800-2100

Filter Size: 60 mesh
\*PTFE 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 synthetic bristle brush.

**Roller** Use a short-nap synthetic 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)	120°F (49°C)	90%

**Do not apply when the surface temperature is less than 5 °F (3 °C) above the dew point.** Water-based products are sensitive to moisture during cure. Protect from rain for 72 hours at 75 °F (24 °C). Do not apply if temperatures are expected to drop below 50 °F (10 °C) within 24 hours of application. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate.

## **CURING SCHEDULE**

Surface Temp.	Dry to Topcoat	Dry to Touch
50°F (10°C)	8 Hours	8 Hours
60°F (16°C)	4 Hours	4 Hours
75°F (24°C)	2 Hours	2 Hours
90°F (32°C)	1 Hour	1 Hour

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.

Recoat intervals may vary from those listed above when using under intumescent fireproofing products. Consult Carboline Technical Service for recommended cure times before applying Carboline intumescent products.

#### When used as a finish coat on steel:

The acrylic film forming process may require several weeks at 75 °F (24 °C) with proper ventilation to develop adhesion and water resistance. High humidity, high film thickness, insufficient ventilation or cooler temperatures will lengthen the Dry to Touch and Dry to Topcoat times due to slower water evaporation rate. Waterborne acrylics are sensitive to moisture during early cure and are susceptible to handling damage.

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#### CLEANUP & SAFETY

Cleanup

Use clean potable water followed with 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. Use adequate ventilation. Keep container closed when not in use.

# PACKAGING, HANDLING & STORAGE

24 months at 75 °F (24 °C)

Shelf Life

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

Storage Temperature &

40-110 °F (4-43 °C)

**Humidity** | 0-90% Relative Humidity

Storage | Store indoors. KEEP FROM FREEZING

Shipping Weight | 1 Gallon - 12 lbs (5 kg) (Approximate) | 5 Gallons - 55 lbs (25 kg)

Flash Point (Setaflash) | >200 °F (93 °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.