

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Fluorourethane Finish
<b>Description</b>	Premium, ultra-durable ambient cured finish meeting AAMA 2604 performance requirements. 950 VOC is a VOC-compliant coating that provides unparalleled color and gloss retention and exterior weathering characteristics. Available in gloss and satin finishes as well as metallic finishes with clear coats, 950 VOC offers a level of durability for field application previously not available in the construction industry. Also can be applied directly to aged PVDF finishes.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Performance upgrade for AWWA D102-11, OCS-4</li> <li>• Meets performance requirements of AAMA 2604 (industry standard for PVDF finishes)</li> <li>• Exceptional color and gloss retention</li> <li>• Available in a variety of Carboline colors</li> <li>• Excellent flow characteristics allow for application by spray or roller</li> <li>• VOC compliant to current AIM and OTC regulations</li> <li>• Ambient temperature cure</li> </ul>
<b>Color</b>	Refer to Carboline Color Guide. Certain colors may require multiple coats for hiding.
<b>Finish</b>	Gloss
<b>Primer</b>	Refer to Substrates & Surface Preparation
<b>Dry Film Thickness</b>	2 - 3 mils (51 - 76 microns) per coat
<b>Solids Content</b>	By Volume 38% +/- 2%
<b>Theoretical Coverage Rate</b>	610 ft <sup>2</sup> /gal at 1.0 mils (15.0 m <sup>2</sup> /l at 25 microns) 305 ft <sup>2</sup> /gal at 2.0 mils (7.5 m <sup>2</sup> /l at 50 microns) 203 ft <sup>2</sup> /gal at 3.0 mils (5.0 m <sup>2</sup> /l at 75 microns) Allow for loss in mixing and application.
<b>VOC Value(s)</b>	Per EPA Method 24: 2.02 lbs./gal (242 g/l) Thinner 214 (10% thinned): 2.77 LBS./gal (332 g/l) Thinner 234 (6% thinned): 2.56 lbs./gal. (306 g/l)  These are nominal values and may vary slightly with color. This product contains US EPA VOC-exempt solvent(s).
<b>Dry Temp. Resistance</b>	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)  Slight discoloration and loss of gloss is observed above 200 F (93 C)

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	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.
<b>Steel</b>	Prepare surface and prime with specific Carboline primers as recommended by your Carboline Sales Representative.
<b>Galvanized Steel</b>	Prepare surface and prime with specific Carboline primers as recommended by your Carboline Sales Representative.

# Carboxane<sup>®</sup> 950 VOC

## PRODUCT DATA SHEET



### SUBSTRATES & SURFACE PREPARATION

**Aluminum** | Prepare surface and prime with specific Carboline primers as recommended by your Carboline Sales Representative.

**Aged PVDF Finishes** | SSPC-SP1  
(A test patch adhesion check is recommended.)

### PERFORMANCE DATA

Test Method	System	Results
AAMA 2604 Paragraph 7.1, 5 Year South Florida Exposure	Zinc rich epoxy/Epoxy/950	Greater than 30% retention of gloss and passes Resistance to Erosion
AAMA 2604 Paragraph 7.3 Hardness	Blasted Steel 1 ct. Epoxy 1 ct. 950	Pass. 3H exceeds F hardness requirements. No rupture of film.
AAMA 2604 Paragraph 7.4 Adhesion	Blasted Steel 1 ct. Epoxy 1 ct. 950	Passes Wet, Dry and Boiling Water Adhesion Test
AAMA 2604 Paragraph 7.5 Direct Impact Resistance	Aluminum 1 ct. 950	Pass 160 inch-lbs. No delamination after tape pull following 0.1 inch minimum deformation
AAMA 2604 Paragraph 7.7 Chemical Resistance	Blasted Steel 1 ct. Epoxy 1 ct. 950	Passes Test for Muriatic Acid, Nitric Acid, Mortar Resistance, Detergent Resistance and Window Cleaner
AAMA 2604 Paragraph 7.8.1 Humidity Resistance	Blasted Steel 1 ct. Zinc 1 ct Epoxy 1 ct. 950	No effect on coated surface after 3000 hours exposure
AAMA 2604 Paragraph 7.8.2 Salt Fog	Blasted Steel 1 ct. zinc 1 ct. Epoxy 1 ct. 950	No effect on plane area; less than 1/32" undercutting at scribe after 3000 hours
AAMA 2604, EMMAQUA	Blasted Steel 1 ct. Zinc 1 ct. Epoxy 1 ct 950	Greater than 96% gloss retention after 1252 MJ/m <sup>2</sup> UV exposure
ASTM D3359 Adhesion	Aged Kynar 1 ct 950	5A
ASTM D4541 Adhesion	Blasted Steel 1 ct. Epoxy 1 ct. 950	1585 psi Pneumatic
ASTM G53 QUV-B for 7,500 hours	1 ct. of 950	Greater than 80% gloss retention

### MIXING & THINNING

**Mixing** | Power mix Part A, then combine Part B (Urethane Converter 811) and power mix to a uniform consistency. DO NOT MIX PARTIAL KITS.

**Thinning** | Spray: Up to 13oz/gal (10%) with #214 for normal as well as hot, windy conditions.  
Roller: Up to 8 oz/gal (6%) with #234. Shake Thinner #234 well before using. Do not exceed 6% by volume.  
Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

**Ratio** | 3.2 Gal. Kit: (3 gal. Part A: 0.2 gal. Part B)  
1 Gal Kit: (0.94 gal. Part A: 0.06 Part B)

**Pot Life** | 4 Hours at 75°F (24°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.

**Spray Application (General)** | The following spray equipment has been found suitable.

**Conventional Spray** | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" I.D. fluid tip and appropriate air cap.

**Airless Spray** | Pump Ratio: 30:1 (min.)\*  
GPM Output: 1.25 (min.)  
Material Hose: 3/8" I.D. (min.)  
Tip Size: .013-.017"  
Output PSI: 2000-2300  
Filter Size: 60 mesh  
\*PTFE packings are recommended and available from the pump manufacturer.

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

**Roller** | Use a 1/4" mohair roller cover such as Armorflex Angora Mohair or equal solvent resistant roller. A minimum of two coats may be required to attain desired appearance, hiding and recommended dry film thickness.

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	40°F (4°C)	40°F (4°C)	0%
Maximum	100°F (38°C)	120°F (49°C)	95°F (35°C)	80%

**Industry standards are for substrate temperatures to be 5°F (3°C) above the dew point. Special application techniques may be required above or below normal application conditions.**

**Caution:** Product is moisture sensitive. Application and/or curing in humidity 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)	6 Hours	6 Hours	24 Hours
75°F (24°C)	3 Hours	3 Hours	20 Hours
90°F (32°C)	2 Hours	2 Hours	16 Hours

These times are based on a 2.0-3.0 mil (50-75 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 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 SDS for this product. Employ normal workmanlike safety precautions.

# Carboxane<sup>®</sup> 950 VOC

## PRODUCT DATA SHEET



### CLEANUP & SAFETY

<b>Ventilation</b>	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. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.
<b>Caution</b>	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, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

### PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	<b>950 VOC Gloss</b> Part A: Min. 36 months at 75 °F (24 °C) Part B (Urethane Converter 811): 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.
<b>Storage Temperature &amp; Humidity</b>	40° – 110°F (4-43°C) 0°-80% Relative Humidity
<b>Storage</b>	Store Indoors
<b>Shipping Weight (Approximate)</b>	1 Gallon Kit - 13 lbs (6 kg) 3.2 Gallon Kit - 38 lbs (17 kg)
<b>Flash Point (Setaflash)</b>	Part A: 87 °F (31 °C) Part B (Urethane Converter 811): 127°F (53 °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.