Carboxane® 950 Clear Gloss

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Fluorourethane
Description	Premium, ultra-durable ambient cured clear coat finish meeting AAMA 605.2 performance requirements. This high gloss coating provides unparalleled color and gloss retention and exterior weathering characteristics. It offers a level of durability for field application previously not available in the construction industry. Also can be applied directly to aged PVDF finishes.
Features	• Ambient temperature cure; no heat cure required • Meets AAMA 605.2 requirements (industry standard for PVDF finishes) • Exceptional weatherability • Excellent flow characteristics allow for application by spray or roller • Excellent graffiti resistance • Enhances long term performance over pigmented or metallic finishes
Color	Clear
Finish	Gloss
Dry Film Thickness	2 mils (51 microns) per coat
Solids Content	By Volume 34% +/- 2%
Theoretical Coverage Rate	545 ft²/gal at 1.0 mils (13.4 m²/l at 25 microns) 273 ft²/gal at 2.0 mils (6.7 m²/l at 50 microns) Allow for loss in mixing and application.
VOC Value(s)	Per EPA Method 24: 3.3 lbs./gal (396 g/l) This product contains US EPA VOC-exempt solvent(s). For thinned VOC information please contact Carboline Technical Service.
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)

SUBSTRATES & SURFACE PREPARATION

General	Normally applied over Carboxane 950 Series finishes as a clear coat. 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.
Aged PVDF Finishes	SSPC-SP1 (A test patch adhesion check is recommended.)
Other Aged Finishes	Must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" adhesion test. Prime with specific Carboline primers as recommended by your Carboline Sales Representative.

PERFORMANCE DATA

Test Method	System	Results
AAMA 605.2 Paragraph 7.3 Hardness	Blasted Steel 1 ct. Epoxy 1 ct. 950	Pass. 3H exceeds F hardness requirements. No rupture of film.
AAMA 605.2 Paragraph 7.4 Adhesion	Blasted Steel 1 ct. Epoxy 1 ct. 950	Passes Wet, Dry and Boiling Water Adhesion Test
AAMA 605.2 Paragraph 7.5 Impact Resistance	Aluminum 1 ct. 950	Pass. No delamination after tape pull following 0.1 inch minimum deformation
AAMA 605.2 Paragraph 7.7 Chemical Resistance	Blasted Steel 1 ct. Epoxy 1 ct. 950	Passes Test for Muriatic Acid, Nitric Acid, Mortar Resistance and Detergent Resistance
ASTM D3359 Adhesion	Aged Kynar 1 ct 950	5A
ASTM D4585 Humidity Resistance	Blasted Steel 1 ct. Zinc 1 ct Epoxy 1 ct. 950	No effect on coated surface after 3000 hours exposure
EMMAQUA	Blasted Steel 1 ct. Zinc 1 ct. Epoxy 1 ct 950	Greater than 90% gloss retention after 1252 JM/m² UV exposure
Graffiti Resistance	Blasted Steel 1 ct Zinc 1 ct. Epoxy 1 ct 950	Complete removal and no stain from all spray paints, crayons, lipstick, shoe polish and marker

Test reports and additional data available upon written request.

MIXING & THINNING

Mixing

Power mix Part A, then combine and power mix to a uniform consistency. DO NOT MIX PARTIAL KITS.

Thinning

Spray: Up to 7 oz/gal (5.5%) w/ #25
Spray: Up to 8 oz/gal (6%) w/ #214 for hot, windy conditions.
Roller: Up to 8 oz/gal (6%) w/ #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 Gallon Kit: 3 gal Part A & 0.2 gal Part B
1 Gallon Kit: 0.94 gal Part A & 0.06 gal 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 and is available from manufacturers.
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: 3.0 (min.) Material Hose: 3/8” I.D. (min.) Tip Size: 0.013-0.017” 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 short (mohair) or hight quality medium (3/8") nap 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 above 5°F (3°C) 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 50% relative humidity and 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.

CLEANUP & SAFETY

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

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 36 months at 75°F (24°C) Part B: 24 months at 75°F (24°C) *Shelf Life: (actual stated shelf life) 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: 12 lbs (5 kg) 3.2 Gallon Kit: 35 lbs (16 kg)
Flash Point (Setaflash)	Part A: 87°F (31°C) Part B: 106°F (41°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.