Carbocoat® 2901

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Long Oil Epoxy Ester
Description	Single-component metallic-finish maintenance coating formulated with a unique pigment system that inhibits corrosion through ion exchange technology. Self-priming, fast dry characteristics well suited for the Power, Transmission/Distribution and Bridge markets.
Features	• Good corrosion protection and weatherability • Ion exchange corrosion protection • Excellent application properties • Single component • Pre-thinned; ready-to-apply • VOC-compliant for most areas
Color	M783 Grey and a limited number of other metallic colors may be available by special order. Contact your Carboline Representative for availability. The alignment of aluminum flakes in aluminum-filled finishes is very dependent on application conditions and techniques. Care must be taken to keep conditions as consistent as possible to reduce variations in final appearance. It is also advisable to work from a single batch of material since variations can occur from batch to batch. For more information consult Carboline Technical Service Department.
Finish	Eggshell
Primer	Self-priming or can be applied over most alkyd and epoxy primers as recommended by your Carboline Representative. A test patch is recommended over existing coatings.
Dry Film Thickness	2 - 3 mils (51 - 76 microns) per coat Do not exceed 3.0 mils in a single coat
Solids Content	By Volume 64% +/- 2%
Theoretical Coverage Rate	1027 ft²/gal at 1.0 mils (25.2 m²/l at 25 microns) 513 ft²/gal at 2.0 mils (12.6 m²/l at 50 microns) 342 ft²/gal at 3.0 mils (8.4 m²/l at 75 microns) Allow for loss in mixing and application.
VOC Values	Thinner 45 : 16 oz 2.9 lbs/gal (348 g/l) **As Supplied** : 2.4 lbs/gal (290 g/l) 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	Not for immersion applications or splash and spillage of acids, alkalies or solvents.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove oil, grease, loose mill scale, dirt, dust and all other contaminants that could interfere with adhesion of the coating in accordance with SSPC-SP 1.
Steel	SSPC-SP2 or SP3 normally acceptable. Self priming with Carbocoat 2901.
Galvanized Steel	*Aged Galvanized Steel - SSPC-SP1. Minimal surface preparation required. Areas of heavy pitting should be wire brushed. Self priming with Carbocoat 2901.
Rusted Steel	SSPC-SP2 or SP3 normally acceptable. SSPC-SP6 or SP7 for steel with extensive deterioration. Self priming with Carboocat 2901.
Previously Painted Surfaces	Existing painted surfaces should have a minimum adhesion rating of 3A (X-cut) rating in accordance with ASTM D3359 adhesion tape test.

MIXING & THINNING

Mixing	Power mix until uniform in consistency.
Thinning	Normally not required. May be thinned 16 oz/gal (13%) with Thinner 45 where conditions dictate. Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

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, 0.052" 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: 1800-2000 Filter Size: 60 mesh *PTFE packings are recommended and available from the pump manufacturer.
Flow Coating	Consult Carboline Technical Service for recommendations.
Brush & Roller (General)	Multiple coats may be required to achieve desired appearance, hiding and recommended dry film thickness over rough surfaces. Avoid excessive re-brushing or re-rolling. This application may result in a streaky appearance due to orientation of the aluminum pigment. For the best aesthetic appearance, spray application is required.
Brush	Use a natural bristle brush.
Roller	Use a medium-nap synthetic roller cover with phenolic core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	35°F (2°C)	35°F (2°C)	35°F (2°C)	0%
Maximum	120°F (49°C)	165°F (74°C)	120°F (49°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.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Topcoat	Dry to Touch
75°F (24°C)	24 Hours	8 Hours	5 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. A **tack coat** followed by a full coat technique is required for best appearance and ease of application. Minimum time between tack coat and full coat is one minute to allow solvent to flash.

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. Use adequate ventilation and wear gloves or use protective cream on face and hands. Keep container closed when not in use.
Caution	This product contains flammable solvents. Keep away from sparks and open flames. In confined areas workers must wear fresh airline respirators. 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	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	35-110 °F (2-43 °C) 0-90% Relative Humidity
Storage	Store indoors.
Shipping Weight (Approximate)	1 Gallon - 15 lbs (7 kg) 5 Gallons - 74 lbs (34 kg)
Flash Point (Setaflash)	96 °F (35 °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.