

SELECTION & SPECIFICATION DATA

Generic Type	Alkyd Enamel
Description	A general purpose air dry enamel that can be used as a self-priming direct to metal (DTM) finish coat. This product has good application characteristics and good corrosion resistance. It can be used for light to moderate industrial and marine service for both maintenance and new construction projects. It can also be used as an OEM finish for a variety of applications.
Features	<ul style="list-style-type: none"> • Smooth, attractive, high gloss finish • Direct-to-metal application if desired • Good weatherability, color and gloss retention • Good corrosion resistance • Good application characteristics • Good durability
Color	Available in package colors C900 Black, 1864 White, 5555 Red, and 6666 Yellow. Other colors may be available upon request. Refer to Carboline Color Chart.
Finish	High Gloss
Primer	Self priming and compatible with Carbocoat series alkyds, Carboguard, and Carbomastic series epoxies.
Dry Film Thickness	1.5 - 2 mils (38 - 51 microns) per coat Do not exceed 3 mils (75 microns) per coat.
Solids Content	By Volume 43% +/- 2%
Theoretical Coverage Rate	690 ft ² /gal at 1.0 mils (16.9 m ² /l at 25 microns) 460 ft ² /gal at 1.5 mils (11.3 m ² /l at 38 microns) 345 ft ² /gal at 2.0 mils (8.5 m ² /l at 50 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 3.75 lb/gal (449 g/L) As supplied: 3.75 lbs./gal (449 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) Discoloration and loss of gloss is observed at elevated temperatures.
Limitations	Not for immersion applications or splash and spillage of acids, alkalies or solvents.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Clean to remove all contaminants in accordance with SSPC-SP 1.
Steel	Direct-to-Metal Minimum Hand Tool Clean in accordance with SSPC-SP2. For optimum performance abrasive blast clean to a minimum of Commercial Blast Clean in accordance with NACE No. 3/SSPC-SP 6 with 1.0 to 1.5 mils (25 to 38 microns) anchor profile. Two coats of finish or one coat of primer and one coat of finish are recommended.

SUBSTRATES & SURFACE PREPARATION

Galvanized Steel | Not recommended over galvanized metal or zinc-rich coatings.

Phosphatized Steel | Surfaces must be clean and dry. Clean to remove all contaminants in accordance with SSPC-SP 1.

MIXING & THINNING

Mixing | Power mix until uniform in consistency and take precautions to prevent entraining air.

Thinning | Not normally required. May be thinned up to 13 oz/gal (10%) with Thinner 225E. Thinners other than those recommended and supplied by Carboline may adversely affect product performance and will 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 spray equipment 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 | Electric or Gas Airless Sprayers: Minimum 0.5 gpm with a minimum 2,800 psi.
 Air Driven Pump Ratio: 30:1 *
 GPM Output: 3.0 (min.)
 Material Hose: 1/4" I.D. (min.)
 Tip Size: 0.013-0.017"
 Output PSI: 1,800-2,800
 Filter Size: 60 mesh
 *PTFE packings are recommended and available from the pump manufacturer.

Brush & Roller (General) | Avoid excessive brushing and rolling.

Brush | Use a good quality brush designed for use with solvent-borne coatings.

Roller | Use a short-nap roller designed for use with solvent-borne coatings.

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)	120°F (49°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. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry Hard	Dry to Handle	Dry to Touch
75°F (24°C)	24 Hours	9 Hours	90 Minutes

These times are based on 2.0 mils (50 microns) dry film thickness and colors made with dry grind pigments. Higher film thickness, insufficient ventilation, high humidity, cooler temperatures, and/or colors made with RTS tint colorants may require longer cure times. Excessive film build or top coating too soon could result in solvent entrapment or premature failure. Adhesion develops and improves over time.

CLEANUP & SAFETY

Cleanup	Use Thinner 225E, Thinner 10, Thinner 45, Acetone, Xylene, etc. 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. Employ normal workmanlike safety precautions. Keep container closed when not in use.
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. 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	36 Months
Storage Temperature & Humidity	35° -110°F (2°-43°C) 0-100% Relative Humidity
Storage	Store Indoors.
Shipping Weight (Approximate)	1 Gallon - 10 lbs. (4.5 kg) 5 Gallons - 51 lbs. (23 kg)
Flash Point (Setaflash)	98°F (37°C). Flash point may vary slightly with color.

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.