

SELECTION & SPECIFICATION DATA

Generic Type	Alkyd Enamel
Description	A high solids, general purpose air dry enamel that is used as a protective finish coat and formulated to meet the needs and requirements of the Rail Industry. Carbocoat 56 may be applied direct to metal or as a topcoat over an appropriate primer.
Features	<ul style="list-style-type: none"> • Smooth, attractive, high gloss finish. • Direct-to-metal application if desired. • Very good weatherability, gloss and color retention. • Outstanding application characteristics. • Economical, fast dry. • Good flexibility. • Impact and abrasion resistant. • VOC-compliant for most areas.
Color	Gray, black, white and other colors available on request.
Finish	Gloss
Primer	Self-priming or over most alkyd, epoxy, polyurethane or other coatings as recommended. A test patch is recommended over existing coatings.
Dry Film Thickness	<p>2 - 3 mils (51 - 76 microns) over primer in a single coat 3 - 4 mils (76 - 102 microns) direct-to-metal in a single coat</p> <p>Do not exceed 4.0 mils (100 microns) in a single coat.</p>
Solids Content	By Volume 56% +/- 2%
Theoretical Coverage Rate	<p>898 ft²/gal at 1.0 mils (22.0 m²/l at 25 microns) 449 ft²/gal at 2.0 mils (11.0 m²/l at 50 microns) 225 ft²/gal at 4.0 mils (5.5 m²/l at 100 microns) Allow for loss in mixing and application.</p>
VOC Values	<p>As Supplied : 3.1 lbs./gal (372 g/l) Thinner 10 : 6oz/gal = 3.3 lbs/ gal (394g/l)</p> <p>These are nominal values and may vary slightly with color.</p>
Dry Temp. Resistance	<p>Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)</p> <p>Slight discoloration and loss of gloss is observed above 200 °F (66 °C)</p>
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 dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	<p>Direct-to-metal SSPC-SP6 Blast Profile should not exceed 3.0 mils (75 microns).</p>

SUBSTRATES & SURFACE PREPARATION

Previously Painted Surfaces | A test patch is recommended over previously painted surfaces.

MIXING & THINNING

Mixing | Power mix until uniform in consistency.

Thinning | Normally not required. May be thinned 6 oz/gal (13%) with Carboline Thinner 10 or 229 as needed to reduce dry spray and lap marks. Use of thinners other than those supplied or recommended 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: 0.015-0.019"
 Output PSI: 1800-2700
 Filter Size: 60 mesh
 *PTFE packings are recommended and available from the pump manufacturer.

Brush & Roller (General) | Avoid excessive re-brushing or re-rolling.

Brush | Use a medium bristle brush.

Roller | Use a short-nap roller with a solvent resistant 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. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Handle
75°F (24°C)	4 Hours	10 Hours

These times are based on a 3.0 mil (75 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. Adhesion develops over a period of time. Wait 30 days before doing adhesion testing.

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. 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	12 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) 0-100% Relative Humidity
Storage	Store indoors.
Shipping Weight (Approximate)	5 Gallon - 66 lbs. (30 kg) 55 Gallons - 700 lbs. (318 kg)
Flash Point (Setaflash)	40 °F (4.4 °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.