

Selection & Specification Data

Generic Type	Alkyd Enamel
Description	A quick-dry, general purpose air dry enamel that is an easy-to-use finish coat. Carbocoat 45 has exceptional application characteristics and fast dry properties. When used with an appropriate primer provides very good protection of steel substrates in mild to moderate exposures. It can be used for both new construction or maintenance.
Features	<ul style="list-style-type: none"> ▪ Smooth, attractive, gloss finish ▪ Good weatherability, gloss and color retention ▪ Excellent application characteristics; spray, brush, or roll ▪ Quick dry to handle times ▪ VOC-compliant for most areas
Colors	Available in Rapid Tint Service; See Carboline Color Chart
Finish	Gloss
Dry Film Thickness	2-3 mils (50-75 microns) Do not exceed 4.0 mils (100 microns) in a single coat.
Solids Content	By Volume: 50% ± 2%
Theoretical Coverage Rate	802 mil ft ² (19.7 m ² /l at 25 microns) 262 sq. ft. at 3 mils (6.5 sq. m/l at 75 microns) Allow for loss in mixing and application
VOC Values	As supplied: 3.5 lbs./gal (419 g/l) Thinned: 5 oz w/ Thinner 10: 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) Slight discoloration and loss of gloss is observed above 200°F (66°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 dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	Apply over properly primed steel

Carbocoat 45

Application Equipment

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.

General Guidelines:

Spray Application (General) The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional Spray Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .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:	.015-.019"
Output PSI:	1800-2700
Filter Size:	60 mesh

Teflon 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.

Mixing & Thinning

Mixing Power mix until uniform in consistency.

Thinning Normally not required. May be thinned up to 5 oz per gallon (4%) with Thinner 10. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

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 MSDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation and wear gloves or use protective cream on face and hands if hypersensitive. Keep container closed when not in use.

Caution This product contains flammable solvents. Keep away from sparks and open flames. In confined areas, workmen 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, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

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.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	50°-90°F (10°-32°C)	55°-90°F (13°-32°C)	55°-100°F (13°-38°C)	30-90%
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. & 50% Relative Humidity	Dry to Touch	Dry to Handle	Dry Hard
75°F (24°C)	30 Minutes	4 Hours	24 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.

Packaging, Handling & Storage

Shipping Weight (Approximate)	<u>1 Gallon</u> 11 lbs. (5.0 kg)	<u>5 Gallons</u> 55 lbs. (25.2 kg)
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Flash Point (Setaflash) 77°F (25°C)

Storage (General) Store Indoors

Storage Temperature & Humidity 40° -110°F (4°-43°C)
0-100% Relative Humidity

Shelf Life 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.**



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