

Selection & Specification Data

Generic Type	Single Component Phenolic Modified Alkyd
Description	Heavy-duty primer formulated to provide long term protection of structural steel. It provides excellent adhesion and can be welded through to yield sound welds.
Features	<ul style="list-style-type: none"> ▪ Good for extended exposure demands ▪ Ability to be welded through ▪ Heavy-metal free ▪ VOC compliant for most areas
Color	Red (0500); Gray (0700)
Finish	Flat
Topcoats	Acrylics, Alkyds (May also be topcoated with catalyzed epoxies and urethanes. Call for specific recommendations.)
Dry Film Thickness	2.0 - 3.0 mils (50-75 microns) per coat Don't exceed 3.0 mils (75 microns) in a single coat.
Solids Content	By Volume: 52% ± 2%
Theoretical Coverage Rate	850 mil ft ² (21.2 m ² /l at 25 microns) Allow for loss in mixing and application.
VOC Values	As supplied: 3.4 lbs./gal (407 g/l) Thinned: 6 oz/gal w/ #10 : 3.7 lbs./gal (443 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 above 200°F (93°C).

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	SSPC-SP6 with a 1.0-2.0 mil (25-50 micron) surface profile for maximum protection. SSPC-SP2 or SP3 as minimum requirement.

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" fluid tip and appropriate air cap.
Airless Spray	Pump Ratio: 30:1 (minimum)* GPM Output: 3.0 (minimum) Material Hose: 3/8" I.D. (minimum) Tip Size: .013" - .017" Output PSI: 2000-2300 Filter Size: 60 mesh *Teflon packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Multiple coats may be required to achieve desired appearance, hiding and recommended dry film thickness. Avoid excessive rebrushing or rerolling.
Brush	Use a natural bristle brush.
Roller	Use a short-nap synthetic roller cover with phenolic core.

Carbocoat® 150

Universal Primer

Mixing & Thinning

Mixing Power mix until uniform in consistency.

Thinning Normally not required but may thin as follows: Spray, brush or roller may be thinned up to 5 oz/gal (5%) 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. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

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. 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.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	50-95°F (10°-35°C)	55-90°F (13°-32°C)	55-100°F (13°-38°C)	30-70%
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)	90%

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	Tack Free	Dry to Topcoat	
			With itself or other alkyds	With epoxies or urethanes
35°F (2°C)	60 Minutes	4 Hours	12 Hours	16 Hours
55°F (13°C)	35 Minutes	90 minutes	5 Hours	12 Hours
75°F (24°C)	10 Minutes	45 Minutes	2 Hours	8 Hours

These times are based on a 2.0 mil (50 microns) 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.

Packaging, Handling & Storage

Shipping Weight (Approximate) 5 Gallon 66 lbs. (30 kg) 55 Gallon 730 lbs. (331 kg)

Flash Point (Setaflash) 83°F 28°C

Storage Temperature & Humidity 35° - 110°F (2°- 43°C) Store indoors. 0-100% Relative Humidity

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.**



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