Carbocoat® 150 Universal Primer

PRODUCT DATA SHEET

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	• Good for extended exposure demands • Ability to be welded through • Heavy-metal free • VOC compliant for most areas • Accepts wide range of topcoats
Color	Standard: Red (0500); Gray (0700) Other unmatched colors are Special Order
Finish	Flat
Dry Film Thickness	2 - 3 mils (51 - 76 microns) per coat Don't exceed 3.0 mils (75 microns) in a single coat. Welding is best achieved when thicknesses do not exceed 1 mil (25 microns).
Solids Content	By Volume 52% +/- 2%
Theoretical Coverage Rate	834 ft²/gal at 1.0 mils (20.5 m²/l at 25 microns) 417 ft²/gal at 2.0 mils (10.2 m²/l at 50 microns) 278 ft²/gal at 3.0 mils (6.8 m²/l at 75 microns) Allow for loss in mixing and application.
VOC Values	Thinner 10 6 oz/gal 3.7 lbs./gal (443 g/l) As Supplied 3.4 lbs./gal (407 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).
Topcoats	May also be topcoated with catalyzed epoxies and urethanes. Call for specific recommendations.

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.

MIXING & THINNING

Mixing	Power mix until uniform in consistency.

MIXING & THINNING

Thinning	Normally not required but may thin as follows: Spray, brush or roller may be thinned up to 6 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.

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” 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: 0.013” - 0.017” Output PSI: 2000-2300 Filter Size: 60 mesh
Brush & Roller (General)	Multiple coats may be required to achieve desired appearance, hiding and recommended dry film thickness. Avoid excessive re-brushing or re-rolling.
Brush	Use a natural bristle brush.
Roller	Use a short-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)	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 applicaton conditions.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Tack Free	Dry to Topcoat w/ itself or other alkyds	Dry to Topcoat w/ 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.

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.
Ventilation	When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured.
Caution	This product contains flammable solvents. Keep away from sparks and open flames.

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° - 100°F (2°- 43°C) 0-100% Relative Humidity
Storage	Store Indoors.
Shipping Weight (Approximate)	5 Gallon - 66 lbs. (30 kg) 55 Gallon - 730 lbs. (331 kg)
Flash Point (Setaflash)	76°F (24°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 or injuries resulting from use. Liability, if any, is limited to replacement of products. 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.