Carboline® GP-20

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	GP-20 Red Oxide Modified Alkyd Primer
Description	GP-20 Primers are relatively fast-drying coatings requiring a minimum down time. They dry to touch in 10-20 minutes at 75℉(24℃) and are formulated with special inhibitive pigments which make them very resistant to atmospheric corrosion and rust undercutting. The high solids content and excellent coverage make the GP-20 more economical than competitive alkyds in the same price-per-gallon range. They have excellent handling properties and trouble-free application characteristics.
Recommended Uses	Recommended for use in any light industrial or light marine service where chemical attack is not a factor. When used with recommended topcoat, should be used for atmospheric protection of plant equipment, farm equipment, road building machinery, pipe rackes, exposed structural steel, color coding for safety zones, tank exteriors, ladders and steel buildings.
Color	Standard colors are: Red 0500 Other colors are made to order
Finish	Flat
Primer	Self-priming.
Dry Film Thickness	2 mils (50 microns) per coat
Solids Content	By Volume 40% +/- 2%
Theoretical Coverage Rate	642 ft²/gal at 1.0 mils (16.0 m²/l at 25 microns) 321 ft²/gal at 4.0 mils (8.0 m²/l at 50 microns) Allow for loss in mixing and application.
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)
Limitations	Immersion service or splash & spillage of strong acids, alkalies or solvents.
Topcoats	May be topcoated with Carboline alkyds, silicone-alkyds, oil-based paints or others as recommended. Specific recommendations include Carboline AD and GP finishes. Do not topcoat with coatings containing strong solvents, such as epoxies or vinyls.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Remove all dirt, dust, oil and all other contaminant.
Steel	For maximum protection dry abrasive blast to a commercial blast finish in accordance with SSPC-SP6 to a degree of cleanliness in accordance with NACE # 3 to obtain a profile less than 1-1/2mil (38µ). Minimum surface preparation is hand tool clean in accordance with *SSPC-SP 2 or SP3 are suitable cleaning methods for mild environments*

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

Thinning	Spray: Thin up to 10% by volume with Carboline Thinner #85. Brush: Thin up to 10% by volume with Carboline Thinner #45 or #85 Roller: Thin up to 10% by volume with Carboline Thinner #45 or #85

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)	Use adequate air volume for correct operation. Hold gun 8-10 inches from the surface and at a right angle to the surface. Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later.
Conventional Spray	Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" 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: .013-.017" Output PSI: 2100-2300 Filter Size: 60 mesh *Teflon packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or rerolling. For best results, tie-in within 10 minutes at 75°F (24°C).
Brush	Use a medium 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)	165°F (74°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.	Dry to Touch	Dry to Recoat	Dry to Handle	Final Cure
40°F (4°C)	30 Min	12 Hours	24 Hours	80 Hours
50°F (10°C)	20 Min	10 Hours	18 Hours	60 Hours
60°F (16°C)	15 Min	8 Hours	15 Hours	48 Hours

75°F (24°C)	12 Min	5 Hours	12 Hours	24 Hours
90°F (32°C)	10 Min	4 Hours	10 Hours	20 Hours

Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure.

CLEANUP & SAFETY

Cleanup	Use Thinner #2 or Xylol. 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. Wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.
Ventilation	When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. User should test and monitor exposure levels to insure all personnel are below guidelines

PACKAGING, HANDLING & STORAGE

Shelf Life	Minimum 12 months at 75°F (24°C) *When kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	35° - 110°F (2 - 43°C) Store indoors 0-100% Relative Humidity
Storage	Store Indoors
Shipping Weight (Approximate)	4 Liters – 5.8 kg 18 Liters – 25.8 kg
Flash Point (Setaflash)	50°F (10°C)

WARRANTY

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