

SELECTION & SPECIFICATION DATA

Generic Type	Waterborne Acrylic
Description	Surface tolerant direct-to-metal primer with excellent corrosion resistant properties, resistance to flash rusting and suitability for SSPC-SP2 and SP3-cleaned steel.
Features	<ul style="list-style-type: none"> • Single component • Resistant to flash rusting • Outstanding corrosion protection • Low odor, low VOC
Color	Orange (0400), Red (0500), other limited colors available.
Finish	Eggshell
Primer	Self-priming. May be applied over Inorganic Zinc primers and other tightly adhering coatings. A mist coat may be required to minimize bubbling over Inorganic Zinc primers.
Dry Film Thickness	2 - 3 mils (51 - 76 microns) per coat Do not exceed 3.0 mils in a single coat.
Solids Content	By Volume 37% +/- 2%
Theoretical Coverage Rate	593 ft ² /gal at 1.0 mils (14.6 m ² /l at 25 microns) 297 ft ² /gal at 2.0 mils (7.3 m ² /l at 50 microns) 198 ft ² /gal at 3.0 mils (4.9 m ² /l at 75 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 0.56 lbs/gal (67 g/l) EPA Method 24: 1.28 lbs/gal (153 g/l) These are nominal values and may vary slightly with color.
Dry Temp. Resistance	Continuous: 235°F (113°C) Non-Continuous: 325°F (163°C) Slight discoloration and loss of gloss is observed above 200 F (93 C)
Limitations	Apply and cure at temperatures of 50°F and above for 24 hours.
Topcoats	Acrylics Normally topcoated with Carbocrylic 3359 series.

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.
Galvanized Steel	SSPC-SP1. Lightly abrade to remove sheen and surface deposits.

MIXING & THINNING

Mixing | Power mix until uniform in consistency. Avoid excessive air entrapment.

Thinning | May be thinned up to 6 oz/gal (5%) with clean, potable water. Areas with cool substrate and warm ambient conditions can experience a surface skinning and separation. Under these conditions, the use of 6-12 oz/gal (5-10%) of Additive 102 assists in the proper film formation at the recommended dry film thickness, without surface skinning. 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) | Pre-rinse equipment with undiluted Carboline Surface Cleaner 3 followed by clean potable water before spraying. 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, 1/2" I.D. minimum material hose, .086" I.D. fluid tip and appropriate air cap.

Airless Spray | Pump Ratio: 30:1 (min.)*
Pump Ratio: 45:1 for two or more guns
GPM Output: 3.0 (min.)
Material Hose: 3/8" I.D. (min.)
Tip Size: .017-.019"
Output PSI: 1800-2200
Filter Size: 60 mesh
PTFE packings are recommended and available from the pump manufacturer. For ease of application, remove the pickup tube and immerse the lower unit directly into the material.

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 synthetic bristle brush.

Roller | Use a short-nap synthetic roller cover with solvent resistant core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	105°F (41°C)	130°F (54°C)	110°F (43°C)	85%

Do not apply when the surface temperature is less than 5°F (3°C) above the dew point. Do not apply if temperatures are expected to drop below 50°F (10°C) within 24 hours of application. 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 Handle	Dry to Topcoat
50°F (10°C)	3 Hours	3 Hours
75°F (24°C)	2 Hours	2 Hours
90°F (32°C)	1 Hour	1 Hour

These times are based on a 2.0-3.0 mil (50-75 micron) dry film thickness. High film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times.

The acrylic film forming process may require several weeks at 75°F (24°C) with proper ventilation to develop adhesion and water resistance. High humidity, high film thickness, insufficient ventilation or cooler temperatures will lengthen Dry to Handle and Dry to Topcoat times due to slower water evaporation rate. Waterborne acrylics are sensitive to moisture during early cure and are susceptible to handling damage.

CLEANUP & SAFETY

Cleanup	Use clean potable water followed with suitable solvent to dry equipment. 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. Use adequate ventilation. Keep container closed when not in use.

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	40° -110°F (4°-43°C) 0-95% Relative Humidity
Storage	Store Indoors. KEEP FROM FREEZING
Shipping Weight (Approximate)	1 Gallon - 11 lbs (5 kg) 5 Gallons - 53 lbs (24 kg) 50 Gallons - 565 lbs (257 kg)
Flash Point (Setaflash)	>200°F (93°C)

WARRANTY

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