



**Industrial
&
Marine
Coatings**

**PRO-CRYL®
UNIVERSAL PRIMER**

B66-310 SERIES

PRODUCT INFORMATION

Revised 8/05

PRODUCT DESCRIPTION		RECOMMENDED USES																					
<p>PRO-CRYL UNIVERSAL PRIMER is an advanced technology, self cross-linking acrylic primer. It is rust inhibitive and designed for both construction and maintenance applications. It can be used as a primer under water-based or solvent-based high performance topcoats.</p> <ul style="list-style-type: none"> • Rust inhibitive • Flash rust / early rust resistant • VOC compliant • Single component • Early moisture resistant • Fast dry • Low temperature application 		<p>For use over prepared steel in industrial environments.</p> <ul style="list-style-type: none"> • Interior and exterior • Barrier coating • Shop or field application • As a substitute for solvent based, universal primers • Can be used as a dryfall coating under certain environmental conditions (see Application Bulletin) <p>Can be used in a variety of applications, including:</p> <ul style="list-style-type: none"> • Railings • Machinery • Structural steel • Steel decking • Marine vessels • Suitable for use in USDA inspected facilities • Storage tank exteriors • Bar joists • Piping • Rail cars <p>Conforms to AWWA D102-03 OCS #3</p> <p>Acceptable for use in high performance architectural applications.</p>																					
PRODUCT CHARACTERISTICS		PERFORMANCE CHARACTERISTICS																					
<p>Finish: Low sheen</p> <p>Color: Off White, Gray, Red Oxide</p> <p>Volume Solids: 39% ± 2%</p> <p>Weight Solids: 53% ± 2%</p> <p>VOC (EPA Method 24): Unreduced: <100g/L; 1.25 lb/gal</p> <p>Recommended Spreading Rate per coat:</p> <p>Wet mils: 5.0 - 10.0</p> <p>Dry mils: 2.0 - 4.0</p> <p>Coverage: 156 - 312 sq ft/gal approximate</p> <p>NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.</p> <p>Drying Schedule @ 6.0 mils wet @ 50% RH:</p> <table border="1"> <thead> <tr> <th></th> <th>@ 40°F</th> <th>@ 77°F</th> <th>@ 120°F</th> </tr> </thead> <tbody> <tr> <td>To touch:</td> <td>2 hours</td> <td>40 minutes</td> <td>20 minutes</td> </tr> <tr> <td>Tack free:</td> <td>8 hours</td> <td>2 hours</td> <td>1 hour</td> </tr> <tr> <td>To recoat:</td> <td>16 hours</td> <td>4 hours</td> <td>2 hours</td> </tr> <tr> <td>To cure:</td> <td>45 days</td> <td>30 days</td> <td>14 days</td> </tr> </tbody> </table> <p>Drying time is temperature, humidity, and film thickness dependent.</p> <p>Shelf Life: 36 months, unopened Store indoors at 40°F to 100°F.</p> <p>Flash Point: >200°F, Seta Flash</p> <p>Reducer/Clean Up: Water</p>			@ 40°F	@ 77°F	@ 120°F	To touch:	2 hours	40 minutes	20 minutes	Tack free:	8 hours	2 hours	1 hour	To recoat:	16 hours	4 hours	2 hours	To cure:	45 days	30 days	14 days	<p>System Tested: (unless otherwise indicated)</p> <p>Substrate: Steel</p> <p>Surface Preparation: SSPC-SP10</p> <p>1 ct. Pro-Cryl Universal Primer @ 3.0 mils dft</p> <p>1 ct. Sher-Cryl High Performance Acrylic @ 3 mils dft</p> <p>Adhesion:</p> <p>Method: ASTM D4541</p> <p>Result: 500 psi</p> <p>Corrosion Weathering:</p> <p>Method: ASTM D5894, 10 cycles, 3360 hours</p> <p>Result: Passes</p> <p>Direct Impact Resistance:</p> <p>Method: ASTM D2794</p> <p>Result: >140 in. lbs.</p> <p>Dry Heat Resistance:</p> <p>Method: ASTM D2485</p> <p>Result: 200°F</p> <p>Flexibility:</p> <p>Method: ASTM D522, 180° bend, 1/4" mandrel</p> <p>Result: Passes</p> <p>Moisture Condensation Resistance:</p> <p>Method: ASTM D4585, 100°F, 1250 hours</p> <p>Result: Passes</p> <p>Pencil Hardness:</p> <p>Method: ASTM D3363</p> <p>Result: H</p> <p>Salt Fog Resistance:</p> <p>Method: ASTM B117, 1250 hours</p> <p>Result: Passes</p> <p>Provides performance comparable to products formulated to federal specification: AA50557 and Paint Specification: SSPC-Paint 23.</p>	
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RECOMMENDED SYSTEMS	SURFACE PREPARATION																				
<p>Steel, waterborne topcoat: 1 ct. Pro-Cryl Universal Primer @ 2.0 - 4.0 mils dft 1-2 cts. Sher-Cryl High Performance Acrylic @ 2-4 mils dft/ct or DTM Acrylic Coating @ 2.5 - 4.0 mils dft/ct or Metalatex Semi-Gloss, @ 1.5 - 4.0 mils dft/ct or Centurion WB Urethane @ 2.0 - 3.0 mils dft/ct or Waterbased Tile Clad Epoxy @ 2.5 - 4.0 mils dft/ct or WB Industrial Enamel @ 1.5 - 3.0 mils dft/ct</p> <p>Steel, solvent borne topcoat: 1 ct. Pro-Cryl Universal Primer @ 2.0 - 4.0 mils dft 1-2 cts. Sherthane 2K Urethane @ 2.0 - 4.0 mils dft/ct or Acrolon 218 HS Polyurethane @ 3.0 - 6.0 mils dft/ct or Tile-Clad High Solids @ 2.5 - 4.0 mils dft/ct</p> <p>Steel: 1 ct. Zinc-Clad XI @ 3.0 - 4.0 mils dft 1 ct. Pro-Cryl Universal Primer @ 2.0 - 4.0 mils dft 1-2 cts. Sher-Cryl High Performance Acrylic @ 2 - 4 mils dft/ct</p> <p>Steel: 1 ct. Zinc-Clad VI @ 2.0 - 3.0 mils dft 1 ct. Pro-Cryl Universal Primer @ 2.0 - 4.0 mils dft 1-2 cts. Sher-Cryl High Performance Acrylic @ 2-4 mils dft/ct</p> <p>Steel / Aluminum / Galvanized: 1 ct. Pro-Cryl Universal Primer @ 2.0 - 4.0 mils dft</p> <p>Acceptable topcoats for: <u>Light Service:</u> 1-2 cts. Metalatex Semi-Gloss, @ 1.5 - 4.0 mils dft/ct or Industrial Enamel HS @ 2.0 - 4.0 mils dft/ct or Industrial Urethane Alkyd @ 2.0-4.0 mils dft/ct <u>Moderate Service:</u> 1-2 cts. Sher-Cryl High Performance Acrylic @ 2-4 mils dft/ct or DTM Acrylic Coating @ 2.5 - 4.0 mils dft/ct or Steel-Master 9500 @ 2.0 - 3.0 mils dft/ct or Hydrogloss @ 2.0-4.0 mils dft/ct <u>Severe Service</u> 1-2 cts. Waterbased Tile Clad Epoxy @ 2.5 - 4.0 mils dft/ct or Centurion WB Urethane @ 2.0 - 3.0 mils dft/ct or Poly-Lon 1900 Polyurethane @ 2.0 - 3.0 mils dft/ct or Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct or Acrolon 218 HS @ 3.0 - 6.0 mils dft/ct</p> <p>The systems listed above are representative of the products use, other systems may be appropriate.</p>	<p>Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.</p> <p>Do not use hydrocarbon solvents for cleaning.</p> <p>Refer to product Application Bulletin for detailed surface preparation information.</p> <p>Minimum recommended surface preparation: Iron & Steel: SSPC-SP2 Aluminum: SSPC-SP1 Galvanizing: SSPC-SP1</p> <tr> <th colspan="2" data-bbox="792 898 1482 940">TINTING</th> </tr> <tr> <td colspan="2" data-bbox="792 940 1482 1024">Do not tint.</td> </tr> <tr> <th colspan="2" data-bbox="792 1024 1482 1066">APPLICATION CONDITIONS</th> </tr> <tr> <td colspan="2" data-bbox="792 1066 1482 1287"> <p>Temperature: 40°F minimum, 120°F maximum (air, surface, and material) At least 5°F above dew point</p> <p>Relative humidity: 85% maximum</p> <p>Refer to product Application Bulletin for detailed application information.</p> </td> </tr> <tr> <th colspan="2" data-bbox="792 1287 1482 1329">ORDERING INFORMATION</th> </tr> <tr> <td colspan="2" data-bbox="792 1329 1482 1423"> <p>Packaging: 1 and 5 gallon containers Weight per gallon: 10.79 ± 0.2 lb</p> </td> </tr> <tr> <th colspan="2" data-bbox="792 1423 1482 1465">SAFETY PRECAUTIONS</th> </tr> <tr> <td colspan="2" data-bbox="792 1465 1482 1738"> <p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. 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Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.</p> </td> </tr>	TINTING		Do not tint.		APPLICATION CONDITIONS		<p>Temperature: 40°F minimum, 120°F maximum (air, surface, and material) At least 5°F above dew point</p> <p>Relative humidity: 85% maximum</p> <p>Refer to product Application Bulletin for detailed application information.</p>		ORDERING INFORMATION		<p>Packaging: 1 and 5 gallon containers Weight per gallon: 10.79 ± 0.2 lb</p>		SAFETY PRECAUTIONS		<p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. 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APPLICATION BULLETIN

Revised 8/05

SURFACE PREPARATION	APPLICATION CONDITIONS
<p>Surface must be dry and in sound condition. Remove oil, dust, dirt, loose rust, peeling paint and other contaminants to ensure adequate adhesion.</p> <p>Do not use hydrocarbon solvents for cleaning.</p> <p>Iron and Steel: Minimum surface preparation is Hand Tool Cleaning per SSPC-SP2. Remove all oil and grease from the surface by Steam Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6.</p> <p>Aluminum: Remove all oil, grease, dirt, oxide and other foreign material by Steam Cleaning per SSPC-SP1.</p> <p>Galvanizing The surface should be weathered for 6 months prior to painting. Remove all oil and grease by Steam Cleaning per SSPC-SP1. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2.</p> <p>Previously Painted Surfaces: If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.</p>	<p>Temperature: 40°F minimum, 120°F maximum (air, surface, and material) At least 5°F above dew point</p> <p>Relative humidity: 85% maximum</p>
	<p style="text-align: center;">APPLICATION EQUIPMENT</p> <p>The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.</p> <p>Reducer/Clean Up: Water</p> <p>Airless Spray Pressure 2000 psi Hose 1/4" ID Tip015" - .019" Filter 60 mesh Reduction Not recommended</p> <p>Conventional Spray Gun Binks 95 Fluid Nozzle 66 Air Nozzle 63PB Atomization Pressure ... 60 psi Fluid Pressure 25 psi Reduction As needed up to 5% by volume</p> <p>Brush Brush Nylon/Polyester Reduction Not recommended</p> <p>Roller Cover 3/8" woven with phenolic core Reduction As needed up to 5% by volume</p> <p>If specific application equipment is not listed above, equivalent equipment may be substituted.</p>



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APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly by boxing and stirring before use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

Wet mils:	5.0 - 10.0
Dry mils:	2.0 - 4.0
Coverage:	156 - 312 sq ft/gal approximate

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 6.0 mils wet @ 50% RH:

	@ 40°F	@ 77°F	@ 120°F
To touch:	2 hours	40 minutes	20 minutes
Tack free:	8 hours	2 hours	1 hour
To recoat:	16 hours	4 hours	2 hours
To cure:	45 days	30 days	14 days

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp edges to protect against early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not use hydrocarbon solvents for cleaning.

Refer to Product Information sheet for additional performance characteristics and properties.

Pro-Cryl can be used as a dryfall coating in certain environmental conditions. Test product before each application. Test by spraying 15-25 feet toward paint container. All material should readily wipe clean. Temperature and humidity will affect ability to dryfall. Hot surface will cause overspray to bond to surface. Always clean overspray immediately from hot surfaces.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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DISCLAIMER

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WARRANTY

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