



ACRYLIC METAL PRIMER V110

Features

- High solids
- Suitable for occupied areas
- Can be recoated in just 4 hours

Recommended For

Carbon Steel, Iron, Aluminum, Galvanized, Other Non-Ferrous Metals, Glass, Lexan, Concrete, Drywall. Acrylic Metal Primer is designed for use in general metal finishing/fabrication, food/beverage processing, chemical processing, industrial maintenance/refurbishment, and other segments where a rust inhibitive, water cleanup primer is necessary.

General Description

Acrylic Metal Primer is a water-reducible, rust-inhibitive primer for steel, iron, and non-ferrous metal. It provides excellent adhesion to a range of hard-to-coat surfaces and can even be applied over tightly adhering rust. Designed for light-to-moderate industrial exposures, this product can be top coated with a wide variety of coatings.

Limitations

- Do not apply if material, substrate or ambient temperature is below 10 °C (50 °F). Relative humidity should be below 90%.
- Do not apply if within 5 degrees of dew point or if rain is expected within 12 hours of application.
- Not for immersion service. Not for use on floors.
- Not for use on Kynar unless tested and approved by user.

Product Information

| <p>Colours — Standard: White (01), Red (20)</p> <p>Can be tinted with up to 60 mL of Universal Colorants.</p> | <table border="1"> <thead> <tr> <th colspan="2">Technical Data◇</th> <th>White</th> </tr> </thead> <tbody> <tr> <td>Vehicle Type</td> <td colspan="2">Water-based Acrylic</td> </tr> <tr> <td>Pigment Type</td> <td colspan="2">Titanium Dioxide</td> </tr> <tr> <td>Volume Solids</td> <td colspan="2">40 ± 1.0%</td> </tr> <tr> <td>Coverage per 3.79 L at Recommended Film Thickness</td> <td>Clean Metal</td> <td>32.5 - 41.8 Sq./M</td> </tr> <tr> <td></td> <td>Tight Rust</td> <td>14.8 - 20.4 Sq./M</td> </tr> <tr> <td rowspan="2">Tight Rust</td> <td>– Wet</td> <td>7.3 - 10.0 mils</td> </tr> <tr> <td>– Dry</td> <td>3.0 - 4.0 mils</td> </tr> <tr> <td rowspan="2">Clean Metal</td> <td>– Wet</td> <td>3.5 - 4.6 mils</td> </tr> <tr> <td>– Dry</td> <td>1.4 - 1.9 mils</td> </tr> <tr> <td colspan="3">Depending on surface texture and porosity.</td> </tr> <tr> <td rowspan="3">Dry Time @ 25 °C (77 °F) @ 50% RH</td> <td>– Tack Free</td> <td>1 Hour</td> </tr> <tr> <td>– To Recoat</td> <td>4 Hours</td> </tr> <tr> <td>– Cure Time</td> <td>7 - 10 Days</td> </tr> <tr> <td colspan="3">High humidity and cool temperatures will result in longer dry, recoat and service times.</td> </tr> <tr> <td>Dries By</td> <td colspan="2">Coalescent</td> </tr> <tr> <td>Viscosity</td> <td colspan="2">85 - 90 KU</td> </tr> <tr> <td>SAG Rating</td> <td colspan="2">Passes 9-10 mils wet (Leneta)</td> </tr> <tr> <td>Flash Point</td> <td colspan="2">93.2 °C (200° F) (TT-P-141, Method 4293)</td> </tr> <tr> <td>Gloss/Sheen</td> <td colspan="2">5 - 10 @ 60°</td> </tr> <tr> <td rowspan="2">Surface Temperature at Application</td> <td>– Min.</td> <td>10 °C (50 °F)</td> </tr> <tr> <td>– Max.</td> <td>32 °C (90 °F)</td> </tr> <tr> <td>Thin With</td> <td colspan="2">Clean Water</td> </tr> <tr> <td>Clean Up Thinner</td> <td colspan="2">Warm, Soapy Water</td> </tr> <tr> <td>Weight Per 3.79 L</td> <td colspan="2">4.9 kg (10.9 lbs)</td> </tr> <tr> <td rowspan="2">Storage Temperature</td> <td>– Min.</td> <td>4.4° C (40 °F)</td> </tr> <tr> <td>– Max.</td> <td>35° C (95 °F)</td> </tr> <tr> <td colspan="3" style="text-align: center;">Volatile Organic Compounds (VOC)</td> </tr> <tr> <td colspan="3" style="text-align: center;">199 Grams/Litre</td> </tr> </tbody> </table> | Technical Data◇ | | White | Vehicle Type | Water-based Acrylic | | Pigment Type | Titanium Dioxide | | Volume Solids | 40 ± 1.0% | | Coverage per 3.79 L at Recommended Film Thickness | Clean Metal | 32.5 - 41.8 Sq./M | | Tight Rust | 14.8 - 20.4 Sq./M | Tight Rust | – Wet | 7.3 - 10.0 mils | – Dry | 3.0 - 4.0 mils | Clean Metal | – Wet | 3.5 - 4.6 mils | – Dry | 1.4 - 1.9 mils | Depending on surface texture and porosity. | | | Dry Time @ 25 °C (77 °F) @ 50% RH | – Tack Free | 1 Hour | – To Recoat | 4 Hours | – Cure Time | 7 - 10 Days | High humidity and cool temperatures will result in longer dry, recoat and service times. | | | Dries By | Coalescent | | Viscosity | 85 - 90 KU | | SAG Rating | Passes 9-10 mils wet (Leneta) | | Flash Point | 93.2 °C (200° F) (TT-P-141, Method 4293) | | Gloss/Sheen | 5 - 10 @ 60° | | Surface Temperature at Application | – Min. | 10 °C (50 °F) | – Max. | 32 °C (90 °F) | Thin With | Clean Water | | Clean Up Thinner | Warm, Soapy Water | | Weight Per 3.79 L | 4.9 kg (10.9 lbs) | | Storage Temperature | – Min. | 4.4° C (40 °F) | – Max. | 35° C (95 °F) | Volatile Organic Compounds (VOC) | | | 199 Grams/Litre | | |
|---|--|-------------------|--|-------|--------------|---------------------|--|--------------|------------------|--|---------------|-----------|--|---|-------------|-------------------|--|------------|-------------------|------------|-------|-----------------|-------|----------------|-------------|-------|----------------|-------|----------------|--|--|--|-----------------------------------|-------------|--------|-------------|---------|-------------|-------------|--|--|--|----------|------------|--|-----------|------------|--|------------|-------------------------------|--|-------------|--|--|-------------|--------------|--|------------------------------------|--------|---------------|--------|---------------|-----------|-------------|--|------------------|-------------------|--|-------------------|-------------------|--|---------------------|--------|----------------|--------|---------------|---|--|--|-----------------|--|--|
| Technical Data◇ | | White | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vehicle Type | Water-based Acrylic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pigment Type | Titanium Dioxide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Volume Solids | 40 ± 1.0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coverage per 3.79 L at Recommended Film Thickness | Clean Metal | 32.5 - 41.8 Sq./M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Tight Rust | 14.8 - 20.4 Sq./M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tight Rust | – Wet | 7.3 - 10.0 mils | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | – Dry | 3.0 - 4.0 mils | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clean Metal | – Wet | 3.5 - 4.6 mils | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | – Dry | 1.4 - 1.9 mils | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Depending on surface texture and porosity. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dry Time @ 25 °C (77 °F) @ 50% RH | – Tack Free | 1 Hour | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | – To Recoat | 4 Hours | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | – Cure Time | 7 - 10 Days | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| High humidity and cool temperatures will result in longer dry, recoat and service times. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dries By | Coalescent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viscosity | 85 - 90 KU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SAG Rating | Passes 9-10 mils wet (Leneta) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flash Point | 93.2 °C (200° F) (TT-P-141, Method 4293) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gloss/Sheen | 5 - 10 @ 60° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Temperature at Application | – Min. | 10 °C (50 °F) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | – Max. | 32 °C (90 °F) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thin With | Clean Water | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clean Up Thinner | Warm, Soapy Water | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight Per 3.79 L | 4.9 kg (10.9 lbs) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storage Temperature | – Min. | 4.4° C (40 °F) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | – Max. | 35° C (95 °F) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds (VOC) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199 Grams/Litre | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>— Tint Bases: N/A</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>— Special Colours: Contact your retailer.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Certification & Qualifications :</p> <p>The products supported by this data sheet contain a maximum of 250 grams per litre VOC /VOS excluding water and exempt solvents.</p> <p>This product is compliant as an Industrial Maintenance coating.</p> <p>Meets Performance Requirements of TT-P-1975 and MIL-P-28577</p> <p>Meets SSPC Paint #23</p> <p>This product has been approved by CFIA (Canadian Food Inspection Agency) for use in Food Processing Facilities.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Customer Information Centre: 1-800-361-5898, info@benjaminmoore.com, www.benjaminmoore.ca</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

◇ Reported values are for White. Contact retailer for values of other bases or colours.

Acrylic Metal Primer V110

Surface Preparation

The performance of this product is directly dependent upon the degree of surface preparation employed. All dirt, oils and accumulated salts must be removed prior to employing specific surface preparation methods. SSPC-SP 1 Solvent Cleaning using Corotech V600 Oil & Grease Emulsifier will best accomplish this task.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by logging onto Health Canada @ <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-contaminants/lead/lead-information-package-some-commonly-asked-questions-about-lead-human-health.html>

Ferrous metals: All loose rust and mill scale should be removed prior to application of this product. This is best accomplished by abrasive blasting. A minimum of SSPC-SP 6 Commercial Blast is recommended for severe environmental exposures. Small areas may be cleaned in accordance with SSPC-SP 2 Hand Tool Cleaning or SSPC-SP 3 Power Tool Cleaning or SSPC-SP 11 Power Tool Cleaning to Bare Metal. Tightly adhering rust may be coated over provided the surface is intended for use in mild atmospheric exposures.

Galvanized steel, aluminum and other non-ferrous metals: Clean bare metal with Corotech V600 Oil & Grease Emulsifier.

Concrete should have form release agents and hardening/curing compounds removed prior to coating. This product is not intended for use on floors.

Application

Mix thoroughly before application. The use of a drill mixer at low speed will best accomplish this task. Should not require thinning, however small amounts of water may be used if necessary.

Airless Spray: Tip range between .015 and .019. Total fluid output pressure at tip should not be less than 2,400 psi.

Air Spray (Pressure Pot): DeVilbiss MBC or JGA gun, with 704 or 765 air cap and Fluid Tip E.

NOTE: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with recommended thinner.

Brush: Synthetic Bristle. / **Roller:** High quality short nap cover.

NOTE: Do not apply if material, substrate or ambient temperature is below 7.2° C (45° F). Relative humidity should be below 90%. Do not apply if within 5 degrees of dew point or if rain is expected within 12 hours of application.

| TEST DATA | |
|--|---|
| Flexibility (ASTM D1737) | Pass 3.2 mm (1/8") Mandrel |
| Dry Heat Resistance | 93.2 °C (200 °F) |
| Wet Heat Resistance | 65.6 °C (150 °F) |
| Adhesion (ASTM D3359) | Pass 5B |
| Salt Spray (ASTM B117) (2 Coats w/1 Topcoat; 1000 Hours) | Rust Breakthrough: 10 Rust Area: 0.01% |
| Abrasion Resistance (ASTM D4060) CS-17 Wheel, 1000 Cycles, 1000 g Load | 100 mg Loss |
| Accelerated Weathering (ASTM G53) 500 Hours | 90% Gloss Retention <0.25 DE Colour Change (CMC) |
| CHEMICAL RESISTANCE GUIDE (NON-IMMERSION) | |
| Fresh Water | See Finish Coat Data Sheets for Resistance Information. |
| Salt Water | |
| Acids | |
| Alkalis | |
| Solvents | |
| Fuel | |
| Acidic Salt Solutions | |
| Alkaline Salt Solutions | |
| Neutral Salt Solutions | |

SYSTEMS RECOMMENDATIONS

COMPATIBLE FINISHES

V220 Line, V300 Line, V330 Line, V400 Line, V410, V440 Line, V500 Line, V510 Line, 540 Line, and Other Acrylics, Vinyl Acrylics & Alkyds

V110 Waterborne DTM Metal Primer can be used as a barrier coat on top of older coatings prior to application of high performance coatings with "hotter" solvents, such as 2 component epoxies and urethanes.

For substrates other than listed above, or for usage in severe environmental conditions, please consult with Corotech® Technical Service.

Clean Up

Clean up with warm, soapy water followed by a clean water rinse.

Environmental Health & Safety Information

Danger

May cause cancer

Causes damage to organs through prolonged or repeated exposure

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/mist/vapours/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: If exposed or concerned get medical attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an approved waste disposal plant.

This document represents hazards of the product referenced above. Refer to the individual Safety Data Sheet for hazards of the specific product you will be using.

KEEP FROM FREEZING FOR PROFESSIONAL USE ONLY

Refer to Safety Data Sheet for
additional health and safety information.