



# ACRYLIC METAL RUST PRIMER Modified Acrylic Primer

## TECHNICAL DATA SHEET

### PRODUCT DESCRIPTION:

ERSystems® Acrylic Metal Rust Primer is a modified acrylic waterborne primer serving multiple purposes. It may be used as a primer and as a finish coat. White in color, air dry, great adhesion and excellent corrosion resistance. It shows superior re-coat ability and exterior durability.

### TYPICAL PROPERTIES:

Property	Typical Value
Percent Solids:	BY Volume 34-36%, By Weight 40-42%
Viscosity:	5000 cps, 65-70 KU
Elongation:	100% at 75°F (23.9°C)
Tensile Strength:	200 psi
Weight/Gallon	9.10 lbs/gal
Gloss	Flat
VOC Content	66 g/l
Shelf Stability	8 months
Cure Time	1-2 hours to recoat (70°F/21.1°C) and 45% R.H.
Dry time	Set to Touch-20 Minutes
Tack Free	30-45 Minutes

### TYPICAL USES:

May be applied over marginally prepared metal surfaces such as structural steel, galvanized sheet metal, steel decking, aluminum and over concrete. Apply at .33 gallon (1.25 liters) per 100 square feet (1.5 - 2 dry mils.) to 0.5 gallon (1.89 liters) per 100 square feet (3-4 dry mils.). More is not better in the case of Acrylic Metal Rust Primer.

### PACKAGING:

- Packaging is standard 5 gallons pails and 55 gallon drums.

### PACKAGING:

- Standard color: White

### APPLICATION EQUIPMENT:

Application may be by brush, roller or airless spray.

- **Brush or Roller:** Recommended for flashing, small inaccessible areas or where over spray may be a problem. Use a paint brush or a standard medium or coarse nap roller.
- **Airless Spray Equipment:** Airless spray equipment should be capable of 1 gallon per minute capacity at 3000 psi. Acrylic Metal Rust Primer is designated a "medium elastomeric coating" with medium viscosity for pump purposes. 1/2" high pressure hoses perform well. The airless spray gun

should be equipped with a ball-bearing swivel for ease of handling. Recommended orifice size is .017" diameter, wide-angle fan pattern. A reverse-a-clean nozzle is recommended. Exact orifice size will vary with temperature of the material and weather conditions.

**SURFACE PREPARATION:** Ferrous substrates must be prepared properly for maximum corrosion protection and long service life. All loose rust must be removed by power washing, wire brushing or sand blasting.

New steel and aluminum surfaces should be cleaned or brushed to a 2 mil profile to achieve maximum adhesion.

New galvanized or galvalume steel must be cleaned to remove any rolling oils or grease before application of Acrylic Metal Rust Primer.

Non-ferrous substrates should be wire brushed to remove all loose coatings, rust, scale, or other contaminants. Prior to coating, wipe clean with a recommended clean-up solvent.

Existing coatings must be tested to determine compatibility and intercoat adhesion. Apply a test area of 6 - 12 sq. inches of Acrylic Metal Rust Primer embed polyester leaving a fabric tail exposed and allow to cure. A 90° pull on the fabric tail will provide an indication of adhesion.

**APPLICATION:** Recommended application on smooth surfaces is to spray apply in one wet full coat to a wet film thickness of 6 – 8 wet mils (1/3 – 1/2 gallon (1.25 liters- 1.89 liters) per 100 square feet. Minimum recommended dry film thickness is 3 mil. A "tack" coat is not recommended. On porous or very rough surfaces, it may be beneficial to backroll or brush a first coat to work the primer into the surface with mechanical action. This should be followed by a spray applied full wet coat. Alternatively, rough or porous surfaces can be given two wet full coats by spray at 1/3 (1.25 liters) per gallon per 100 square feet.

**CURING AND RE-COAT TIME:** Relative humidity has a substantial effect on application and cure time. 85% R.H. or more will significantly slow dry times. 20% R.H. or less will tend to cause dry overspray problems. Application techniques and viscosity may have to be adjusted to ensure even results during extremes in relative humidity.

Under normal drying conditions of 70°F (21.1°C) and 45% R.H. Acrylic Metal Rust Primer will be ready to re-coat in 1 - 2 hours.

**APPLICATION LIMITATION:**

This product dries extremely rapidly on tips and aircaps. They should be cleared frequently and immersed in water when temporarily not in use, to prevent drying and tip clogging. Once dry, overspray from this product is extremely difficult to clean up or remove. Be sure that areas that are not to be painted are well protected from overspray. Once dry, MEK may be required for clean up. The substrate temperature range for application is 40° F (4.45°C) - 120°F (48.9°C).

Do not apply when air temperature or surface temperatures are below 40° F (4.45°C).

Acrylic Metal Rust Primer must not be applied during inclement weather or if precipitation is imminent. Acrylic Metal Rust Primer should not be used in areas of ponding water.

**CLEAN UP:**

Flush all hoses, equipment, and tools with water immediately after use.

**STORAGE:**

Always store Acrylic Metal Rust Primer above 40°F (4.45°C). Keep from freezing!

**CAUTION:**

Avoid prolonged and repeated contact with skin. Do not take internally. Acrylic Metal Rust Primer Modified-Acrylic Primer may be attacked by some solvents. If solvents are to come in contact with Acrylic Metal Rust Primer Modified-Acrylic Primer, the user should test solvent on a cured sample prior to application, or request information from ITWPSNA technical services.

PRIOR TO USE OF THIS MATERIAL,  
READ ALL APPROPRIATE SAFETY DATA SHEETS

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