



# MONOBOND RI



**MONOPOLE INC.**  
Manufacturer of  
U.S. SPECIALTY COATINGS

**MONOBOND Rust Inhibitive Metal Primer** is a water based self cross-linking acrylic/urethane containing a zinc phosphate anti-corrosion inhibitor. It is fast drying and has low VOC and low odor while displaying excellent film hardness. **MONOBOND RI** is designed to provide superior adhesion, corrosion and rust protection for interior and exterior metal applications. It dries to flat finish and can be coated with water base or solvent base enamels.

**BASIC USES: MONOBOND RI** can be used for vertical or horizontal, interior and exterior applications. It can be top coated with acrylic/latex, oil based alkyds, epoxies, urethanes, etc.

- Ideal for prepped ferrous and non ferrous surfaces
  - Galvanized Steel
  - Aluminum
  - Structural Steel
  - Iron and Steel
- Beams and Columns
- Machinery and Equipment
- Doors and Jambes
- Handrails and Bollards

#### ADVANTAGES:

- Water Clean-Up
- Low to No Odor
- Quick Dry to Recoat Time
- Apply Down to 40°F
- Long Term Corrosion Resistance
- Acceptable for use in USDA Inspected Facilities
- Spray, Brush, or Roll On

#### SURFACE PREPARATION

- Conduct a through test patch to ensure proper adhesion.
- Sanding and scuffing the surface will maximize adhesion.
- Surfaces must be clean, dry and free of rust/corrosion, dirt, chalk, grease, oils, salts and contaminants that inhibit proper adhesion.

#### METAL SURFACES:

- New metal must be weathered a minimum of six (6) months or be cleaned to remove residual oil. Residue can be removed using environmentally safe cleaner, such as Simple Green.
- Scrape and remove all loose/flaking rust. Wipe surface clean.
- The surface must be dry and free from all dirt, dust, oil, grease, wax and all loose materials and contaminants that can affect the adhesion of the coating. For best results make sure the surface is cleaned to a minimum SSPC-SP2 standard of surface preparation. For best results, use commercial blast cleaning per SSPC-SP6. Prime with **MONOBOND RI** the same day as cleaned.

#### Non-Ferrous Metals (galvanized, aluminum, stainless steel, etc.):

Remove all oils or films with a neutral detergent or emulsion cleaner. Blast lightly with fine abrasives or conduct a light etching. Then rinse the surface with zinc and coat within 3 hours with **MONOBOND RI** to avoid oxidation.

#### PHYSICAL PROPERTIES

**Composition:** Urethane-Modified Acrylic

**VOC:** < 90 g/L

**White Base Weight Solids:** 51% ±2

**White Base Volume Solids:** 41% ±2

**Neutral Base Weight Solids:** 39% ±2

**Neutral Base Volume Solids:** 34% ±2

**Weight per Gallon:** 10.2 Lbs

**Finish:** Flat

**Viscosity:** 90-100 Ku's

**Coverage:** 230-310 Sq. Ft per Gallon

Recommended Dry Mills: 1.5 - 2

Recommended Wet Mills: 4.3 - 5.7

Always apply a test patch to check for adhesion, compatibility and proper results.

**Drying Time @77° and 50% Relative Humidity:**

Dry To Touch: 30 Minutes

Recoat Time: 2-3 Hours

Cooler Temperature, higher humidity and film thickness will require longer drying time.

**Shelf Life:** 18 Months

#### Ferrous Metals:

Remove all the loose rust, dirt, grease or other contaminants by one of the following depending on the degree of cleanliness required. Blast SSPC-SP3; SSPC-SP2; SSPC-SP6; SSPC-SP7. Blast lightly with fine abrasives or conduct a light etching. Then rinse with Zinc and apply **MONOBOND RI** within 3 hours to avoid oxidation.

#### Previously Painted Surfaces:

- If in sound condition, clean the surface of all adhesion affecting contaminants.
- Smooth, hard, or glossy coating surfaces should be dulled by abrading to maximize adhesion.
- Apply a test area, allowing primer to dry for one week before testing the adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Priming with **MONOCHEM 21** "stick to anything primer" is another option.

#### APPLICATION:

One coat of its required. Allow 30-60 minutes of dry time before top coating. If 24 hours are exceeded, the **MONOBOND RI** will need to be abraded for proper adhesion. Always conduct a test patch for approval prior to painting the substrate.

#### APPLICATION METHOD:

- Brush: Use a nylon/polyester brush
- Roller: Use a quality 1/4" to 3/4" nap roller
- Conventional Spray: Use a 0.013-0.015" tip at 1500-1750 psi.

## PACKAGING & TINTING

**MONOBOND RI** is available in neutral tint and white base and can be tinted using water base universal pigments.

White Base Short-Fill: 2 Oz/Gal    Neutral Base Short-Fill: 8 Oz/Gal

**#1890-01:** 1 Gallon Can            **1880-01:** 1 Gallon Can

**#1890-05:** 5 Gallon Pail            **1880-05:** 5 Gallon Pail

## SAFETY & PRECAUTIONS:

- Refer to **MONOBOND RI SDS** sheets before use.
- Do not apply when surface temperature is below 40°F or above 90°F.
- Do not apply in windy conditions or if rain is eminent within 48 hours.
- Do not apply to surfaces containing more than 15% moisture.
- Do not apply to surfaces displaying a pH over 8.
- Do not apply to surfaces that have hydrostatic pressure. Check adhesion of old paint before repainting by testing a small area.
- Protect from freezing. Keep away from children. Provide adequate ventilation and wear proper protective equipment during application.
- Do not take internally. *Ingestion:* Do not induce vomiting, call a physician immediately.
- Avoid contact with skin or eyes. *Eye Contact:* Flush the affected eye with clean water for 15-minutes.
- Wash skin with soap and water.
- Avoid breathing vapors. Use with adequate ventilation.
- Close the container after each use.
- Observe normal safety precautions.

## CLEAN UP:

Wash tools and equipment immediately after use (while wet) with soap and hot water.

**WARNING!** Removal of old paint by sanding, scrapping, or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health affects, especially in children or pregnant women. For more information, call the National Lead Information Center at 1-800-424-LEAD or contact your local health authority. Do not use hydrocarbon solvents for cleaning.

## PERFORMANCE CHARACTERISTICS:

### Crosshatch Adhesion: (Aluminum & CRS)

Method: ASTM D3359

Result: Excellent (5B)

### Pencil Hardness:

Method: ASTM D3363

Result: F/H

### Impact Resistance:

Method: ASTM D2794, 250 Lbs

Result: Pass

### Flexibility:

Method: ASTM D522, 180° bend, ½ Mandrel

Result: Pass

### Dry Heat Resistance:

Method: ASTM D2485

Result: 325°F

### Salt Fog Resistance:

Method: ASTM B117, CRS, 30 Day Cure

Result: 500 hours @4 DFT: Pass (7)

**WARRANTY INFORMATION:** MONOPOLE believes that the information in this publication is an accurate description of the typical characteristics and/or uses of the product or products. It is your responsibility to thoroughly test the product in your specific application to determine its safety and performance capabilities. Since use of this product is beyond our control, MONOPOLE, INC. cannot assume any risk or liability for results obtained when not used according to our specifications and directions. Unless MONOPOLE provides a specifically written statement of fitness for a particular use, MONOPOLE'S sole warranty is that the product will meet its current sales specifications. MONOPOLE disclaims any other expressed or implied warranties, including the warranty of merchantability and fitness for use. Your exclusive remedy and MONOPOLE'S sole liability for breach of warranty is limited to a refund of the purchase price or replacement of any product proven to be defective. In no event shall the seller be liable for any loss of profits or other consequential damages, including labor charges.