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PRODUCT DATA SHEET

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WATERBASED RUST INHIBITOR CONCENTRATE (WRIC)

Product Description:

WRIC is a concentrated, waterbased rust inhibitor specifically formulated for use with **Dustless Blasting** water-blasting equipment. When added to the blast water, this product prevents flash rusting of steel and ferrous surfaces and removes surface contaminants such as chlorides, sulfates, nitrates and soluble salts.

Features and Advantages:

- **Waterbased**
- **Non-Flammable**
- **Non-Hazardous**
- **Biodegradable**
- **Environmentally Safe**
- **Leaves No Residue**
- **Compatible with most coatings**

Product Data:

- **Physical State:** Clear, water-white liquid
- **Odor:** Slight ammonia-like odor
- **pH:** 10.3
- **Specific Gravity:** 1.033 (water = 1.00)
- **Flash Point:** None - Not Flammable
- **Boiling Point:** $\geq 212^{\circ}\text{F}$ (100°C)
- **Freezing Point:** $\leq 32^{\circ}\text{F}$ (0°C)

Recommended Use:

- 1) For most applications, dilute the concentrate 100 to 1 with clean, potable water (100 gallons of water to one gallon of concentrate). For best results use in the blast water and in the rinse water.
- 2) In high humidity conditions (> 85% relative humidity) or on substrates exposed to marine (saltwater) or contaminated environments, it may be necessary to dilute the concentrate 50 to 1 (50 gallons of water to one gallon of concentrate) in the blast water and rinse water.
- 3) Use only clean water to dilute the concentrate. Avoid using "process water" or any water that has been previously used for other purposes. Hard water, containing calcium salts, magnesium salts, and carbonates can interfere with the effectiveness of the product.

Application:

1. High humidity, high temperature and the amount of surface contamination will determine the occurrence of flash rusting. Hot, humid conditions (>90°F 85%+ R.H.) will cause flash rusting to occur faster and reduce the “hold time” of the blasted surface.
2. Plan the application to prevent freshly blasted surfaces from being exposed to rain, or overnight heavy fog. Heavy rain can wash-off the water soluble concentrate before it can fully work and flash rusting will occur.
3. Abrasive blast the desired surfaces with the water/concentrate solution according to Dustless Blasting equipment instructions followed by a low pressure water/concentrate solution rinse to remove any traces of blast media or residue.
4. This concentrate can also be diluted 50 to 1 and used as a pressure wash/flush rinse after dry blasting operations.
5. After initial blasting is complete, blow off any ponding water solution from flat areas with clean, compressed air and allow the surface to air dry.
6. The best recommended practice is to apply the primer coating as soon as possible after the blasted surface is completely dry.

Expected Hold Times*:

- 48+ Hours – Full Exterior Exposure, ≈ 35°- 90°F (1.7°-32.2°C) 50-75% Relative Humidity, no rain.
- 72+ Hours – Covered Exterior Exposure, ≈ 35°- 95°F (1.7°-35°C) 50-75% Relative Humidity, no direct rain contact.
- 168+ Hours – Interior Non-Climate Controlled area, ≈ 55°- 85°F (12.8°-29.4°C) 50-75% Relative Humidity.

* Hold Time is the length of time the substrate remains free of flash rusting after water-blasting. Actual Hold Time before flash rusting occurs may vary based upon ambient conditions. Above times were determined based upon 100:1 dilution using Dustless Blasting wet blasting equipment.

Compatibility with Commercially Available Paints and Coatings:

This Waterbased Rust Inhibitor Concentrate (WRIC) is formulated to be compatible with all chemical types of commercially available paints and coatings. When used as directed with **Dustless Blasting** water-blasting equipment, the WRIC cleans and passivates the metal substrate to prevent flash rusting. It leaves no harmful residue to interfere with the protective coatings' adhesion or performance. It is compatible with organic and inorganic solventbased and waterbased coatings.

The following is a partial list of the types of paint and coatings compatible with WRIC:

- ✓ Alkyd Metal Primers, Modified Alkyd Primers, Direct-To-Metal Alkyds
- ✓ Automotive Primers, Automotive Primer/Sealers, Automotive Basecoat/Clearcoat systems
- ✓ Amine Cured Epoxy, Polyamide Cured Epoxy, Amine Adduct Epoxy
- ✓ Coal Tar Epoxy, Phenolic Modified Epoxy, Cycloaliphatic Amine Epoxy, Zinc Rich Epoxy
- ✓ Solventbased Acrylics, Solventbased Vinyl and Chlorinated Rubber coatings
- ✓ Polyurethane Primers, DTM Polyurethane Enamels
- ✓ Waterbased Epoxy Primers, Waterbased DTM Epoxy
- ✓ Waterbased Acrylics, Waterbased Styrene Acrylics, DTM Acrylics
- ✓ Solventbased Inorganic Zinc Ethyl Silicate Primers
- ✓ Waterbased Inorganic Zinc Primers

Packaging and Storage:

Available in 5 gallon plastic pails, 55 gallon metal drums and 275 gallon plastic totes.

Special storage conditions are not necessary except to store product above 32°F (0°C) to prevent freezing.

Health and Safety:

This product is considered non-hazardous under normal, specified use conditions. Standard industrial hygiene practice suggests to read and understand the Safety Data Sheet (SDS) before using this, or any chemical product.

Disclaimer: Information presented in this Product Data Sheet is believed to be true and accurate and is generated or obtained from accurate and reliable sources. Information is provided here only as a guide to proper product use. MMLJ Manufacturing has no direct control over the transport, storage, dilution or application of this product, therefore no guarantee of the ultimate performance of this product is given or implied.



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