NATIONWIDE CHEMICAL COATING MFRS., INC. • 7106 24th Court East • Sarasota, Florida 34243 • U.S.A.

www.nationwidecoatings.com

HIGH-TECH WATERBASED **RED IRON OXIDE**

METAL-PRIME RED-OX™

PROTECTIVE WATERPROOFING

ZINC RICH HIGH SOLIDS METAL PRIMER SEALER

CAN BE USED AS A SYSTEM PRIMER FOR WARRANTY REQUIREMENTS FOR PRODUCTS REQUIRING A PRIMER COAT

PRODUCT DATA #5790

03/26/10

superseding: 08/01/08

PRODUCT DESCRIPTION:
METAL-PRIME RED-OX™ is a revolutionary new, multi-purpose, waterborne latex, red iron oxide primer sealer. It is designed to protect metals from rusting during storage or erection, and for general maintenance to retard the spread of existing rust on metals. METAL-PRIME RED-OX™ is formulated with an optimum high solids blend of environmentally acceptable Zinc and Corrosion Resistant Pigments in a 100% Acrylic Waterproofing Resin base. A safe, low V.O.C. mixture with low odor for interior or exterior use which maintains the same level of performance as the "old" Red Lead and Zinc Chromate Primers. METAL-PRIME RED-OX™ has excellent adhesion to most any metal surface plus provides excellent waterproofing and chemical resistance. It has all the advantages of solvent based products without the use of hazardous solvents. Easy application and cleans up while still wet with soap and water. METAL-PRIME RED-OX™ does not have to be top coated, but can be top coated with most any latex paint or coating.

METAL-PRIME RED-OX™ USES:
METAL-PRIME RED-OX™ can be used for interior or exterior surfaces, including metal roofs. It has excellent adhesion to aluminum, steel, galvanized, ferrous and other metals in normal chemical environments. It is excellent for both new construction and renovations on industrial, commercial and residential applications.

SURFACE PREPARATION:
For proper adhesion and maximum performance it is essential that the surface is prepared properly. The surface must be absolutely clean, dry, and free of all scaling rust, mill scale, dirt, grease, wax, oil, chalk, incompatible paint or detergent/chemical films. Rusted metals should be cleaned down to remove all scaling and flaking rust by scraping, wire brushing, sanding or sandblasting. Be sure the surface is thoroughly de-greased and moisture free before priming. Use a degreaser on galvanized or coated metals that have oils or surface treatments.
Apply only to a sound, completely dry, well prepared roof surface. Leaks must be repaired before any coating is applied. Prepare surface by thoroughly pressure washing with a water and chlorine mixture using at least 1500 P.S.I. to remove any previous coatings, dirt, grease, and other foreign materials, especially mold, mildew and algae. METAL-PRIME RED-OX™ will resist mildew growth, but will not kill mildew already on the surface. Apply METAL-PRIME RED-OX™ in rusted or corroded areas that need to be treated. TWO COATS OF METAL-PRIME RED-OX™ MUST ALWAYS BE APPLIED. Patch any holes, cracks, flashings, valleys, vents, etc., with PERMAPATCH™, a Waterproof Caulk and Sealant, after METAL-PRIME RED-OX™ application. Tape & seal all seams with PERMATAPE™, a Polyester Fabric Tape. NOTE: METAL-PRIME RED-OX™ may be used as a saturant for the PERMATAPE™ with the second coat of METAL-PRIME RED-OX™ applied over the PERMATAPE™.

APPLICATION PROCEDURE:
Stir well. You will notice METAL-PRIME RED-OX™ to be quite thick. This is necessary to hold the high solids of zinc and red iron oxide pigments in suspension. If thinning is necessary, use water sparingly, not exceeding 8 ounces per gallon of primer. Be sure to only thin the amount of product that will be used within 24 hours, or settling of pigments may occur. If possible, METAL-PRIME RED-OX™ should be applied as is from the container, no thinning. Apply at temperatures above 40° Fahrenheit and when primer will not be subjected to rain or heavy dew before it has had a chance to dry (approximately 2-4 hours). Apply with short nap roller, brush or at least a 1 gallon per minute piston type airless sprayer with a minimum tip size of .027. Apply uniformly and do not leave any puddles. Two coats are required. The first coat may show some flash rusting, but the second coat will completely encapsulate all active oxidation. Spot priming is acceptable, but the applicator should be aware of the possibility of microscopic rust not visibly seen. Spot prime with two coats of METAL-PRIME RED-OX™ and extend one foot beyond the perimeter of the rust. Consideration should be given to two coat the entire surface area greatly reducing any possibility of future rust. Wait at least 12 hours before applying a second coat. Dry times will vary depending on weather.

Airless Sprayers: Use at least a 1 gallon per minute piston type airless sprayer with a minimum tip size of .027. Remove all line filters and gun filters before spraying.

Clean Up: Clean up all spills, tools and overspray immediately while the coating is still wet with warm soapy water.

APPLICATION SPECIFICATIONS:

METAL-PRIME RED-OX™ must be applied as followed for best performance and Warranty Compliance:
- Surfaces with less than 40% Rust; Spot Prime with Two Coats of METAL-PRIME RED-OX™ over affected area(s) extending one foot beyond perimeter of visible rust, then prime entire surface with a Full Coat of PERMABOND™.
- Surfaces with over 40% Visible Rust or Corrosion: Spot Prime with One Coat of METAL-PRIME RED-OX™ over affected area(s) extending one foot beyond perimeter of visible rust, and One Full Coat of METAL-PRIME RED-OX™ over entire surface to be painted or coated.
MIL THICKNESS: The primer coat of METAL-PRIME RED-OX™ must result in a minimum 15 mil total dry film thickness for two coats.
MAXIMUM SPREAD RATES: METAL-PRIME RED-OX™ must be applied at no more than 150 square feet per gallon.

Just because rust is not visible, does not mean it has not started to form, Two Full Coats of METAL-PRIME RED-OX™ is strongly recommended; any application less than two full coats of METAL-PRIME RED-OX™ applied at no more than maximum spread rates may not be effective to prevent, retard or stop rust and corrosion.

TECHNICAL SPECIFICATIONS:

Ambient Temperature of 77°F and RH of 50%

Rates & Times May Vary Beyond Specifications

FINISH:	Flat	SPREAD RATE:	100 - 150 sq.ft. per gallon
COLOR:	Brownish Red	DRY to TOUCH:	2 to 4 Hours
VEHICLE TYPE:	Copolymer Emulsion	RECOAT:	12 Hours
SOLIDS by WEIGHT:	59% +/- 2%	CURE TIME:	5 to 7 Days
SOLIDS by VOLUME:	43% +/- 2%	SIZES:	1 Gal., 5 Gal., 55 Gal.
V.O.C.'s (averages):	.83lbs./gal. • 100.0g/liter	GALLON WEIGHT:	11.9 lbs. +/- .3 lbs.

Information presented on this Data Sheet has been compiled from sources to be reliable, and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so.

Phone: 941-753-7500 • U.S. Toll Free: 1-800-423-7264 • Fax: 941-753-1773 • E-Mail: info@natcoat.net

MATERIALS HEALTH, SAFETY AND ENVIRONMENTAL DATA SHEET

MSDS#: 5790

Product Identification

Product Name: **METAL-PRIME RED-OX™**
Product Code #: **5790**
General Usage: Red Iron Oxide Metal Primer
General Description: Pigmented Latex Primer
C.A.S. Number: None Established; Mixture

Manufacturer Information

Manufacturer's Name: Nationwide Chemical Coating Mfrs., Inc.
Address: 7106 24th Court East; Sarasota, FL 34243-3993
Emergency Telephone: 1-800-423-7264 or 941-753-7500
Information: 1-800-423-7264 or 941-753-7500
Web Site: www.nationwidecoatings.com E-Mail: info@natcoat.net
Date Effective: January 1st, 2005

Chemical and Physical Properties

Color: Brownish Red	Odor: Pungent Odor
Physical State: Liquid	Odor Threshold: Unknown
Boiling Point: 212 Fahrenheit	Melting Point: N/A
Specific Gravity (H_2O=1): >1	Freezing Point: 32 Fahrenheit
Vapor Presence: about same as H_2O	Solubility in H_2O: Soluble
Percent Volatile: 36-41%	pH (undiluted): 8 to 8.5
Evaporation Rate (Butyl Acetate=1): <1	Vapor Density (Air=1): <1

Fire Protection Information

Decomposition/Combustion:	N/A
Flash Point:	N/A; Does Not Burn
Recommended Extinguishing Media:	N/A
Flammable Limits:	N/A

Storage and Reactivity

Hazardous Polymerization:	Will Not Occur
Storage Conditions:	Keep from Freezing
Toxic Products Which May Form:	None

Transportation

Hazard Classes:	None; Not Hazardous
Hazard Labels:	Not Required
Hazard Determination:	MSD Sheet
Shipping Containers:	Varies
Shipping Class:	Class 55; Water Based Paint

Container Labeling

Explanation of Unique Labeling System: None Used

Health Hazard Data

SHORT TERM EXPOSURE

Route of Entry:	Precautionary Treatment
Inhalation:	Expected None
Skin:	Expected None
Eyes:	Flush Immediately with large amounts of water for at least 15 minutes, holding eyelids open. Call a physician if irritation persists
Ingestion:	Call a physician if significant amounts have been Swallowed. Give patient large amounts of water or milk for dilution.

LONG TERM EXPOSURE

Carcinogen:	None
Target Organ Effects:	None
Other Health Hazards:	None Known

Personal Protection

Respiratory Protection:	No inhalation hazard expected
Protective Clothing:	None Required
Ventilation:	Local
Other Protective Measures:	None
Eye Protection:	Safety Glasses

Spill or Leak Protection

Accidental Release or Spill:	Collect liquid or solidify with absorbent package for disposal
Neutralizing Chemical/Media:	N/A

Treatability

Biodegradability: With water prior to cure.
Influence on Biological Wastewater Treatment: None
Other Impacts on Wastewater Treatment: None
Recommended Wastewater Treatment: Dilutable
Constituents Interfering With or Not Amenable to Biological or Wastewater Treatment: None

Recommended Waste Disposal

Dispose of in accordance with Federal, State and Local guidelines.

EMERGENCY & INFO: 1-800-423-7264

Form based on O.S.H.A. Form 20. Information presented herein has been compiled from sources to be reliable and is accurate and reliable to be the best of our knowledge and belief but is not guaranteed to be so.

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