Technical Information

OxiX™

Corrosion Control Coating

Description OxiX™ is an environmentally-sustainable corrosion control polymer coating designed to protect metals and plastics from oxidizing in corrosive environments. It has excellent stability in acidic vapor environments and corrosive salt conditions such as protecting metals on transportation vehicles exposed to extreme road-salt conditions. OxiX™ is zero-VOC[1], contains no heavy-metals including zinc or chromium, contains no California Proposition 65 chemicals, and exhibits an HMIS rating of 1-0-0-B. This polymer is water-based and is ideally applied with a brush, roller, or airless paint sprayer.

Features & Benefits

- Excellent at preventing corrosion on many surfaces and metals
- Good adhesion properties
- Promotes paint adhesion to aluminum without the use of acids
- Preserves all metals
- Prevented less than 0.01% white rust on aluminum in 10 year corrosion study[2]
- Prevented less than 1% rust on steel in 10 year corrosion study[3]
- Galvanized coated with OxiX™ exhibited no change in 10 year corrosion study
- Can be top coated with a variety of coatings
- Can be pigmented to a variety of colors
- Acid resistant
- Protects against corrosion from salts, such as road salts
- No VOC[1], No HAP, No Prop 65 chemicals, No heavy metals
- Can replace many coatings for an Environmentally-Sustainable future

Technical Information

Physical Properties

Physical	Value
VOC	<5 g/L
pH	10.4 - 10.9
Specific Gravity	1.03 g/ml
Solubility in Water	Complete
Flash Point	Does Not Flash
Solids Content	23% - 26%
Appearance and Odor	White Opaque Liquid with little odor
Sara Title 3	No
Prop 65	No
DOT Shipping Information	Not Regulated by DOT

1. SCAQMD, Rule 314 (p), fees for VOC are exempt for coatings which contain 5 g/L VOC or less. The coatings industry has informally adopted the definition of a "zero-VOC" coating as a coating which contains 5 g/L or less VOC.
2. SAE J2721 test method was performed (dip method), 80 cycles performed. This is equivalent to 10 years of accelerated corrosion in northern road salt conditions.
3. SAE J2721 test method was performed (dip method) for 13 cycles. A coating thickness of approximately 3 mil was used. After 13 cycles, ASTM D1654, Scribe Method, was performed to measure creepback. This was followed by 80 cycles of SAE J2721 (dip method), for a total of 93 cycles. 80 cycles is equivalent to 10 years of accelerated corrosion and 93 cycles is equivalent to 11.6 years of accelerated corrosion in a northern road salt environment.

GHS

Hazard Classification

Skin Corrosion/Irritation - 3
Serious Eye Damage/Eye Irritation - 2B

Signal Word and Pictogram

WARNING

no pictogram for hazard

Hazard Statements

H316 - Causes mild skin irritation.
H320 - Causes eye irritation.

Precautionary Statements

P332+P313 - If skin irritation occurs: Get medical advice/attention.
P264 - Wash thoroughly after handling.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.

First Aid

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a physician immediately. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists, consult a doctor. Continue rinsing.

HMIS NFPA

HEALTH	1
FIRE	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

Personal Protection

Always use in areas with good ventilation. In areas with poor ventilation or confined spaces, a dust mask or respirator may be required. Wear chemical resistant gloves and safety glasses to avoid consistent exposure to OxiX™. If contact with OxiX™ occurs, it is best to rinse with soap and water before product dries. Additional PPE may be required for certain situations. Check with your EH&S department for additional guidelines.

Storage and Handling

Do not store OxiX™ at temperatures below 32˚F as product can freeze. Be sure to wear proper PPE when handling this product. In case of small spills, rinse liberally with water into sanitary sewer. In case of large spills, contain spill and absorb with absorbent material and follow local, state, and federal guidelines for disposal. Do not store in direct sunlight.

Directions

PREPARE THE SURFACE

Clean surfaces thoroughly before applying OxiX™ coatings. Use OxiX™ Prep Cleaner™ (OxiX™ p/n 3050) to prepare the surface prior to coating with OxiX™. Be sure to remove any loose soil, loose rust, or loose paint. Oxidized metal (rust) or paint that is not loose to the touch may be left on the surface and top-coated with OxiX™. Light flash-rust is acceptable. Avoid the use oil or solvent-based cleaners when preparing the surface as they can interfere with the adhesion process. Be sure to remove any residual grease or oil on surfaces as it can interfere with the adhe-sion process. If the grease or stain cannot be removed with Prep Cleaner™, an oil-based or water-based solvent may be used; but, these areas must be thoroughly wiped clean with an alcohol (ethyl or iso-propyl alcohol[4] is preferred) before applying OxiX™. If pre-cleaning the surface with an acid, be sure to neutralize the surface thoroughly by washing with Prep Cleaner™ before applying OxiX™.

APPLY OxiX™

Mix OxiX™ well before using[5]. Apply OxiX™ to the surface evenly by spraying, or by wiping with a soft smooth lint-free cloth or microfiber towel, by paint brush, or with a paint roller. For best results, we recommend the application of OxiX™ with a commercial airless sprayer[6], HVLP sprayer, or pressure pot sprayer. The final appearance of OxiX™ on the surface may vary with the applica-tion method used. It is recommended that dedicated paint equipment be used for applying OxiX™ to prevent cross-contamination with incompatible materials. Consult your paint equipment supplier for optimal spray settings and nozzles. The amount of time to dry varies on the paint method used, number of coats applied, and drying temperature. It is not recommended to apply OxiX™ at temperatures below 50˚F. Do not let the liquid concentrate freeze. For better adhesion and to help reduce paint runs, a light application (tack-coat) of OxiX™ is recommended as the first coat. For better protection, it is recommended to apply at least two coats of OxiX™ (not including the tack-coat). Be sure to let each coat dry thoroughly before applying the next coat. A total coating mil-thickness of 0.5 mil to 3.0 mil is acceptable for most OxiX™ applications. Consult your OxiX™ representative for more information. It is recommended to apply thinner coats of OxiX™ in several applications instead of one thick coat in one application.

If applying a topcoat to OxiX™, be sure to allow OxiX™ to dry thoroughly before painting, especially if applying an oil-based topcoat. Oil-based topcoats and single/double stage coatings are typically compatible with OxiX™ as a primer. Powder coat systems are compatible with OxiX™ as a primer. It is good practice to validate the compatibility of your topcoat with OxiX™ beforehand. There is no extra cure time required for OxiX™ before topcoating. OxiX™ requires on average a cure time of 3 to 7 days at ambient temperature for maximum adhesion. It is highly recommended to perform any adhesion tests no sooner than the 3 day cure time.

4. Iso-Propyl Alcohol is also commonly referred to as Rubbing Alcohol.
5. When mixing, bubbles may form in the container. It is good practice to filter these air bubbles with a screen.
6. An online guide to airless spraying is available from Graco® Inc, at http://www.graco.com/content/dam/graco/ced/literature/misc/321132/321132EN-F.pdf

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Directions (continued)

POST-SPRAY CARE OF OxiX™

Parts treated with OxiX™ should be cleaned with mild soap only. OxiX™ Hand Wash Detergent (OxiX™ p/n 6175) is acceptable for cleaning surfaces coated with OxiX™. Dish detergents, such as those commonly found in consumer grocery stores for hand-washing of kitchenware, are typically acceptable. Commercially available hand-wash vehicle cleaners are typically acceptable. Avoid "butyl-based" degreasers or solvent-based cleaners when cleaning a surface treated with OxiX™. Avoid using high pH/high alkaline cleaners on surfaces coated with OxiX™. Avoid using strong low-pH acids when cleaning surfaces coated with OxiX™. Many detergents are compatible with OxiX™, even though they may be a high pH/high alkaline or low pH acid, when diluted throughly with water. For good general practice, test your wash process on a sample panel coated with OxiX™ to validate their compatibility. Consult your OxiX™ specialist for more information.

FREQUENCY OF REAPPLICAION OR REMOVAL OF OxiX™

To remove a coating of OxiX™ safely from most surfaces, use OxiX™ Remover (OxiX™ p/n 3001). Consult your OxiX™ specialist for more information.Re-application of OxiX™ will vary with weather exposure, the application thickness of OxiX™, degree and intensity of sun exposure, amount of physical contact (such as that which occurs during cleaning and maintenance of parts), and the accidental and improper use of an incompatible cleaner with the coating. Consult your OxiX™ specialist for more information.

Packaging Information

OxiX™ is available in 1 gallon (3.8L), 5 gallon (19L), 15 gallon (57L), 55 gallon (209L), 275 gallon (1041L), 330 gallon (1249L), and bulk truck options. Custom sizes may be available upon request.

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