



# PRODUCT DATA

## CORROSION MANAGEMENT SOLUTIONS

### DRY COAT™ RUST PREVENTATIVE **ST**

#### FEATURES AND BENEFITS

**Dry Coat™ Rust Preventative **ST**** is a water-based, liquid RP designed to provide up to 3 months of short-term protection for ferrous metals stored indoors. It can be applied by dip, spray, or flow coat, and it dries to the touch in under 30 minutes at ambient temperatures. **Dry Coat **ST**** protects metal in two ways: it provides a clear, protective coating that acts as a physical barrier, while also emitting ARMOR VCI Nanotechnology™ to create a second, molecular shield on the surface of metal that repels water and other substances known to cause rust.

**Dry Coat **ST**** is not sticky or tacky, making it resistant to attracting dirt or dust. Additionally, it does not interfere with processes such as stamping, grinding, cutting, or welding, providing a user-friendly alternative to solvent and oil-based corrosion inhibitors. If necessary, Dry Coat **ST** can be easily removed using mild detergent or a metal cleaning solution.

**Dry Coat **ST**** is ideal for small parts in large quantities (such as nuts and bolts, fasteners, and hardware) or irregularly shaped parts that cannot be placed into ARMOR POLY® VCI bags or ARMOR WRAP® VCI paper. It also works well in protecting export equipment, machinery, gears, pipes, flanges, cast iron, and other ferrous metal parts by saving time and money compared to other rust prevention methods. **Dry Coat Rust Preventative **ST**** protects metal parts stored indoors for up to 3 months.

#### PRODUCT OVERVIEW

All Armor Protective Packaging® products utilize our proprietary and time-proven ARMOR vapor corrosion inhibitor (VCI) Nanotechnology™. Oxidation occurs when an electrolyte (water, oxygen, etc.) is present on the surface of a metal. The corrosion process begins when electrons flow through the electrolyte from high energy areas (anode) to low energy areas (cathode) of the metal. ARMOR VCI blocks this reaction by passivating the surface and inhibiting the electrochemical current flow from anode to cathode. ARMOR VCI's protective vapors adhere to a metal surface to form an invisible film only a few molecules thick to protect metal from attack.

#### ABOUT ARMOR

Armor Protective Packaging® offers rust prevention and rust removal products that are clean, safe, easy, and that protect metals while in-process, in transport, or in storage. ARMOR combines its VCI (vapor corrosion inhibitor) Nanotechnology™ with packaging materials such as paper and poly film to create products that displace moisture on metal and guard against rust. ARMOR also offers desiccants, emitters, foam pads and its Metal Rescue® Rust Remover Bath and **Dry Coat™ Rust Preventative **ST****. For more than 40 years, ARMOR has worked with customers from around the globe to provide rust prevention and rust removal solutions and to Take the Work Out of Your Workday!



You won't find a customer service team on this earth more excited to talk about rust, so give our corrosion needs a call with your questions and make their day.

**800.365.1117**



## DRY COAT™ RUST PREVENTATIVE **ST**

### Parameter

Ferrous  
pH (10%)  
Odor  
Weight  
VOC content  
Duration of protection

### Dry Coat Rust Preventative ST

Clear Amber  
8.1  
Bland  
8.4 lb/gal  
< 1%  
Up to 3 months protection, indoors.

### SPRAY

Spray Dry Coat ST onto metal parts, ensuring the entire surface is uniformly covered, and air dry. Drying can be accelerated with warm air or fans directed at the coated metal parts. If applied too liberally, the excess will roll off the metal part, leaving the correct amount on the metal surface. There is no need to atomize during application; instead, it's preferred to use the coarse setting on spray equipment or sprayers.

### FLOW COAT AND IMMERSION

Dry Coat ST can be applied via flow coat method or as part of a dip process. Begin by thoroughly wetting the entire surface with the solution. To minimize drag-out, allow excess solution to drip back into the dip tank or a catch bin. Reusing the drippings is acceptable until the fluid becomes contaminated with oils, dirt, etc.

### REMOVAL

Dry Coat ST dries to a tack-free finish that is clear and nearly undetectable. Dry Coat ST does not interfere with further processing such as stamping, grinding, cutting, welding, or burnishing and does not require removal before the metal part or substrate is placed in service. When applying paint or conversion coatings, follow recommended surface preparation. If removal is necessary, use mild detergent or a metal cleaning solution.

### STORAGE

Keep containers tightly closed to avoid evaporation of water. Material should be kept in original packaging or equivalent during storage. Ensure containers are labeled. Avoid eye and skin contact. Do not take internally.

### SHELF LIFE

When stored indoors, unopened and in the original packaging, Dry Coat ST has a shelf life of up to two years. After the original packaging has been opened, the shelf life is one year, as long as it is in the original packaging or an equivalent. Proper storage temperatures are between 40°F and 140°F.

**CAUTION:** After handling product, wash hands thoroughly. For repeated use, wear protective gloves. Do not eat or drink when using – if swallowed, rinse mouth and drink plenty of water. If symptoms develop from exposure, seek medical attention.

## COMPATIBILITY OF DRY COAT RUST PREVENTATIVE **ST** WITH METALS

Metal to be Protected	DRY COAT ST
Aluminum	-
Aluminum Bronze	-
Aluminum Magnesium alloy	-
Brass	-
Bronze	-
Cadmium	-
Cast Iron	★ ★ ★
Chromium	-
Constantan	-
Copper	-
Galvanized	-
Lead	-
Molybdenum	-
Nickel	-
Nickel Silver (CU, Ni, Zn)	-
Silver	-
Solder (Pb, Sn)	-
Stainless Steel	-
Steel	★ ★ ★
Tin (Pure)	-
Tinned Steel	-
Zinc	-

### Compatibility Key

★ ★ ★ Complete Protection

- Dry Coat ST is not designed to protect this metal type, although should be compatible. For multiple metal applications, testing is recommended to ensure compatibility.

All products manufactured Armor Protective Packaging® are warranted to be first class products and free from defects in material and workmanship. Liability under this warranty is limited to the net purchase price of any of such products proven defective or at our option to the repair or replacement of said products upon their return to us transportation prepaid. All claims on defective products must be made in writing 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. We make no warranty, express or implied, as to the suitability of any of our product for any particular use, and we shall not be subject to liability from any damages resulting from their use in operations not under our direct control. This warranty is exclusive of all other warranties, express or implied, and no representative of ours or any other person is authorized to assume for us any other liability in connection with the sale of our products.

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