



Technical Bulletin

#117

Dry Coat™ Rust Preventative Long Term Storage and Overseas Shipments

Dry Coat™ RP

Dry Coat™ is a water-based rust inhibitor with a surfactant package that enables it to effectively wet the substrate and adhere to the metal surface with the appropriate film thickness. Dry Coat™ can be applied to ferrous metals by dip, spray or flowcoat. Parts should be allowed to drain completely to allow excess Dry Coat™ to flow off of the part leaving the correct amount on the metal surface.

Dry Coat™ dries to a tack-free finish that is clear and barely noticeable on the metal surface. The final film is not tacky and will not attract dirt and other contaminants. In many cases the Dry Coat™ finish does not require removal before the part or substrate is placed in service. Under most conditions, Dry Coat™ does not interfere with further processing. Common metal forming operations such as welding, stamping, grinding, or burnishing can often be performed without removal of the Dry Coat™ finish.

Dry Coat™ Long-Term Storage

Dry Coat™ is specifically designed to form a very thin, almost imperceptible coating that is easily removed. As such, exposure to outdoor elements or direct water impingement will drastically shorten the duration of protection. Dry Coat™ provides indoor protection up to one year and is not recommended for outdoor use unless used in combination with other ARMOR products that will provide protection from the elements.

The duration of protection can be increased to well over two years when products treated with Dry Coat™ are stored in sealed enclosures (containers, bags, etc.). The protection provided by Dry Coat™ will not be affected by minor amounts of moisture in the enclosure. Dry Coat™ contains Vapor Corrosion Inhibitors (VCI) that will continuously redeposit displacing moisture on metal surfaces. However, large amounts of moisture can “wash away” and solvate Dry Coat™ during repeated evaporation and condensation cycles. When targeting long term storage with Dry Coat™ it is necessary to limit the amount of moisture in the enclosure.

Dry Coat™ Recommendations for Over Seas Shipments

Similar to long term storage, a full enclosure should be used for difficult applications and overseas shipments. Extreme swings in temperature will cause significant evaporation and condensation cycles. For smaller sized packages, combining Dry Coat™ with other ARMOR products such as ARMOR POLY® films and bags will provide sufficient protection. For larger size enclosures such as a pallet, care must be taken to limit the amount of moisture in the enclosure. Additional ARMOR products such as ARMOR WRAP® VCI paper or desiccants can be used to help control the amount of free moisture in the enclosure.

Applications may include many variations of product, packaging configuration and environmental conditions. ARMOR Protective Packaging® recommends trialing packaging configurations prior to implementation. The sales and technical service staff at ARMOR Protective Packaging® are happy to assist you with questions and recommended testing on specific applications.

Published by: ARMOR Protective Packaging Technical Services, May 2, 2011

F:Product Standards/Technical Bulletins