

ZERUST® Corrosion Solutions



Worldwide Corrosion Prevention



Corrosion And Its Prevention



A Natural Aging Process For Metals

Corrosion is generally initiated when atmospheric moisture (humidity) settles on metals. This moisture will act as a conductor enabling the flow of electrons between high-energy areas (cathodes) and low-energy areas (anodes) on metal surfaces. This electrochemical process then results in the visible oxidation referred to as tarnish, corrosion or rust.



Principles:

The molecular ZERUST® layers that form on metal surfaces suppress corrosion in three ways:

1. They passivate the electron flow between the anodic and cathodic areas on the surfaces.
2. They form a physical, hydrophobic layer that prevents water and moisture directly contacting the metal and acting as an electrolyte.
3. They regulate the PH value of the electrolyte.

ZERUST® Corrosion Inhibitors

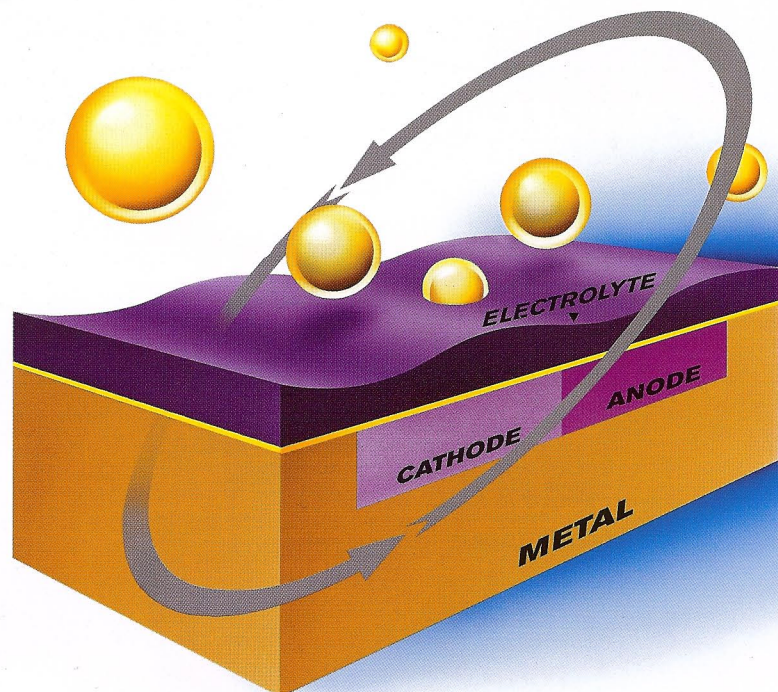
ZERUST® is a line of volatile corrosion inhibiting (VCI) packaging materials. The ZERUST® packaging materials contain proprietary chemical formulations that release an invisible, odorless, and non-toxic corrosion inhibiting vapor into the air. The ZERUST® vapor molecules will settle on exposed metal surfaces in an enclosure and interrupt the electrochemical corrosion process.

"In effect, the ZERUST® corrosion protection applies and removes itself."

ZERUST® Technology Is Easy To Apply

Simply place metal parts into ZERUST® packaging and seal it. Within two or three hours the interior of the package will be saturated with ZERUST® vapor molecules and a powerful corrosion inhibiting molecular layer will form on all exposed metal surfaces.

Later, when the parts are removed from the packaging, the ZERUST® corrosion inhibiting molecular layer will immediately proceed to vaporize into the atmosphere. This leaves behind clean dry and corrosion free parts that are ready for immediate use and require no further cleaning or handling.



Zerust® Product Types and Tips



ZERUST® packaging materials incorporate a range of proprietary corrosion-inhibiting formulations in order to compensate for the different chemical compositions of various metals and metal alloys.

Ferrous

Iron, steel and cast iron metals are protected using the trademark yellow ZERUST® Ferrous packaging.

Non Ferrous

(Class - C) **A**luminum, copper, brass, bronze and fully galvanized steel are protected using blue ZERUST® Non Ferrous (C) packaging.

(Class - S) **S**ilver, manganese, magnesium and their alloys can be protected using blue ZERUST® Non Ferrous (S) packaging.

Multi-Metal

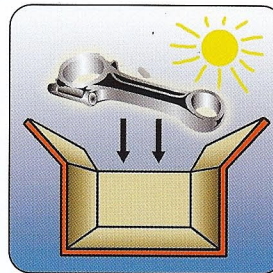
Products that contain combinations of the Ferrous and Non Ferrous metals listed above can be protected using green ZERUST® Multi-Metal packaging.

Silver

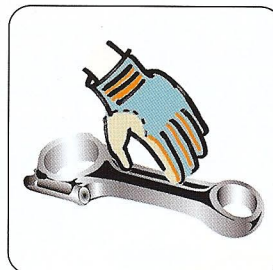
Silver can be protected from tarnishing with clear ZERUST® Silver packaging.

ZERUST® packaging materials have a shelf life of two years, and a subsequent in-service life of up to 5 years. It is highly recommended that customers consult with ZERUST® application engineers, in order to ensure the implementation of the appropriate formulation and the best packaging design.

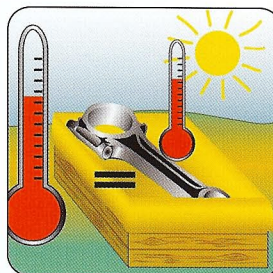
INSTRUCTIONS FOR USE



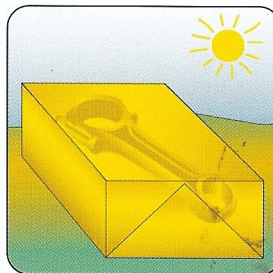
Pack only clean and dry parts!



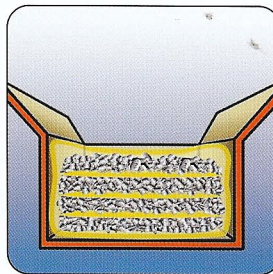
Wear gloves to avoid leaving acidic, corrosion causing fingerprints.



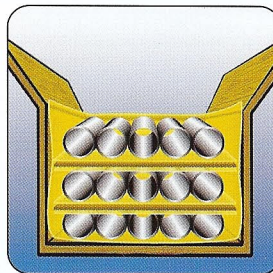
When packing, the ambient temperature and part temperature should be the same to prevent condensation from forming inside the pack.



Seal packs by heat sealing or applying waterproof tape.



Insert additional ZERUST® packaging materials in the center of tightly packed parts to ensure protection throughout.



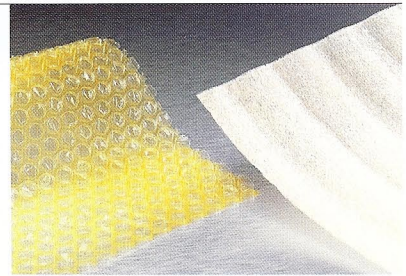
Avoid the contact of metal parts with wood, paper or cardboard as these materials contain corrosion-causing acids.

Product Guide



Zerust® Bubble Wrap

ZERUST® Bubble wrap provides corrosion protection as well as physical protection.



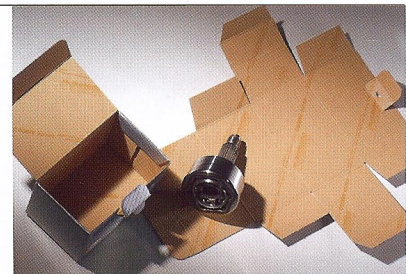
Zerust® Unico Foam

ZERUST® Unico Foam offers corrosion protection as well as physical protection.



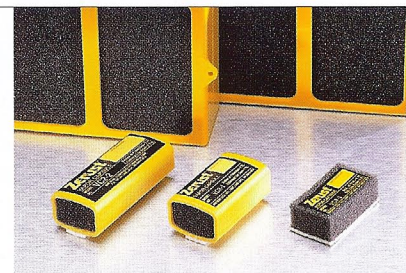
Zerust® Cardboard

ZERUST® Cardboard, like all ZERUST® products, can be custom manufactured to meet client specifications.



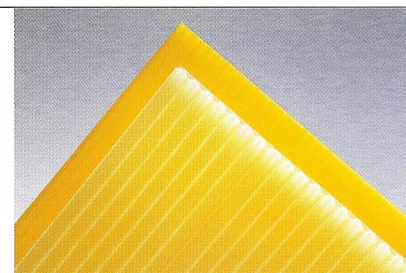
Zerust® Capsules

ZERUST® Vapor Capsules provide corrosion protection inside of enclosures like electrical control boxes.



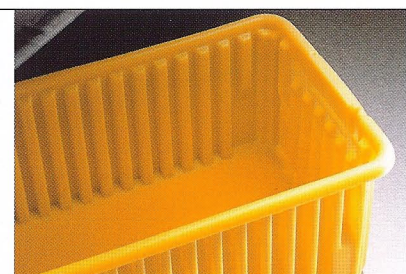
Zerust® Profile Boards

ZERUST® Profile Boards are ideal replacements for ordinary corrugated boards when developing a reusable corrosion control packaging system.



Zerust® Dunnage

ZERUST® Dunnage can be custom formed to replace conventional client dunnage.



Product Guide



Zerust® Film

Zerust® Film is available in a wide range of sheeting, tubing and center-fold sheeting.



Zerust® Bags

ZERUST® Bags can enclose a part or line a box in seconds



Zerust® Stretch Film

ZERUST® Stretch Film offers a secure method of enclosing products while providing corrosion protection.



Zerust® Skin Film

ZERUST® Skin Film can secure parts to sheets of ZERUST® treated cardboard.



Zerust® Shrink Film

ZERUST® Shrink Film provides corrosion protection and increases pack integrity.



Zerust® Abrigo Paper

ZERUST® Abrigo Paper is a high quality technical corrosion inhibiting paper without the traditional disadvantages of ordinary VCI paper.

