

Zerust®



Corrosion Solutions for the Waste Water Industry



ZERUST® Corrosion Protection

Product Solution Highlights

ZERUST® Activ™ Series Diffusers

ActivPak®, ActivCapsule™ and ActivTab™ products are easy-to-use diffusers that provide fast-acting and powerful corrosion protection. Drop-in the product to protect sensitive metals even in the most challenging environments.

ZERUST® Vapor Capsule Diffusers

Vapor Capsules provide targeted corrosion protection to metals and come in many different sizes. They are odorless, non-toxic, residue-free, and are designed to work in restricted spaces.



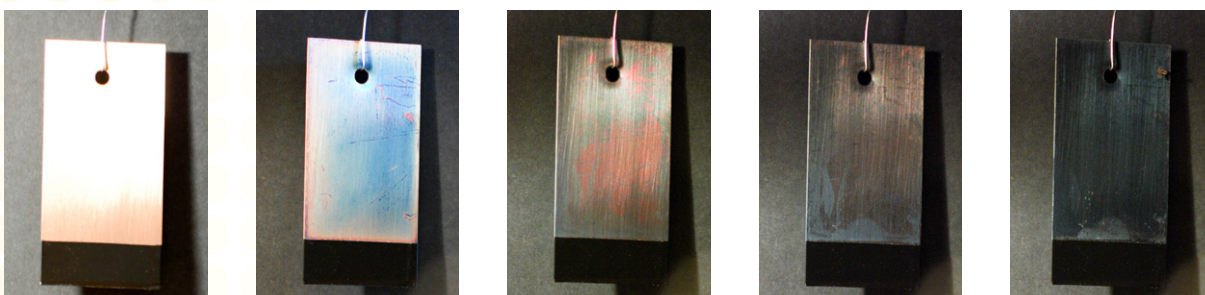
An ActivPak® diffuser packet protects in corrosive environments.

Time Release Photos of ZERUST® ActivPak® in Action

A side by side test conducted on copper panels in a waste water treatment plant control room were documented in a time lapse sequence of photos. Each panel was placed into an enclosed space to simulate an electronics cabinet. The first enclosure had an ActivPak® packet inside and the second enclosure had no protection. The panel in the ZERUST® protected space had almost no change, while the unprotected panel corroded severely after 48 hours. Further testing showed the protected panel had no visible corrosion for over a month.



Panel protected by ActivPak® in H₂S sulfur gas environment. (2-18 ppm)



Unprotected panel in H₂S sulfur gas environment. (2 - 18 ppm)

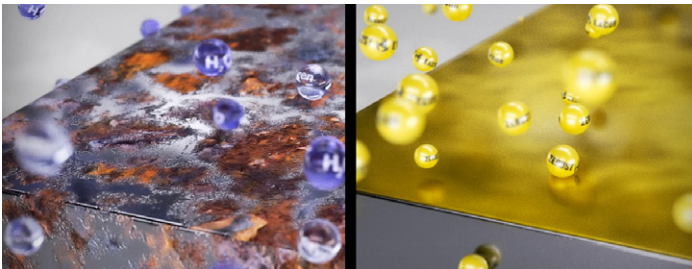
ZERUST® is Safe For Electronics:

ZERUST® Protection

- Does not affect the functionality of circuitry
- Does not harm printed circuit boards and sensitive ICs
- Does not leave galvanic effects, conductive residues or surface changes
- Is clean, dry and invisible corrosion inhibiting technology
- Is safe and easy to use for personnel

Safe for Electronics, Tough on Humidity and Contaminants

Reduce electronic equipment failures that lead to downtime due to corrosion with ZERUST® corrosion protection. ZERUST® protects even in electronic enclosures in corrosive atmospheres with high humidity, condensation, or traces of aggressive pollutants such as sulfides and chlorides that are found in waste water treatment environments. ZERUST® corrosion inhibitor technologies work to combat these causes of corrosion, even acid-gases and moisture.



The effects of atmospheric contaminants on a metal surface pictured unprotected on the left and with ZERUST® protection on the right.



ZERUST® VC6-1 Vapor Capsule protects multiple metal types in an electronics room.

ZERUST® Protection for Waste Water Treatment Plants

The corrosion process is especially aggressive in waste water plant environments. ZERUST® field engineers have extensively studied our products effectiveness in these situations. The cost and inconvenience of corrosion doesn't have to be accepted, now there is a solution with ZERUST®.



Avoid replacing expensive electronics. ZERUST® ActivPak® extends the life of electronics and reduces downtime and the need to replace components.

Proven Safe, Reliable and Effective Corrosion Solutions for Electronics in Highly Corrosive Environments

ZERUST® corrosion inhibiting products are a cost-effective way to protect electrical components and equipment from the destructive effects of corrosion, even in corrosive environments. For almost 50 years, ZERUST's proprietary vapor corrosion inhibitor (VCI) technology has been proven safe and effective for protecting sensitive metals. An analysis of compatibility using recognized test procedures can be arranged with a local ZERUST® representative.



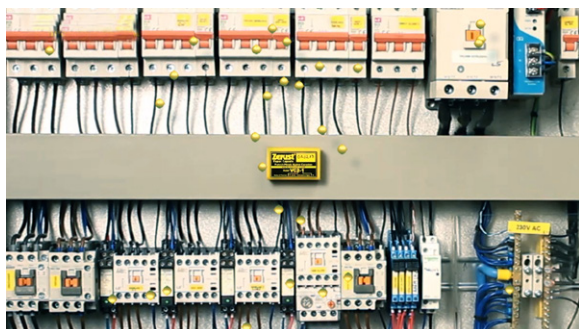
ZERUST® ActivPak® protects expensive controllers in a panel inside of a wastewater treatment plant.

The Benefits of ZERUST® Corrosion Inhibitor Products

- Longer equipment life and sustained reliability
- Lower operating and maintenance costs
- Reduced down time and fewer repairs
- Protection from corrosion for multiple metal types
- Solutions for other issues such as electrostatic discharge (ESD), acid-gas and Ultra Violet (UV)

How ZERUST® Vapor Corrosion Inhibitors (VCIs) Work

VCI molecules inhibit corrosion by preventing moisture and environmental elements from reacting with the metal surface. Since VCI molecules are transported through the air, they must be trapped around the metal surface using a poly bag or other enclosure. Later, when the enclosure or package is opened, the ZERUST® corrosion inhibiting layer dissipates, leaving clean, dry and residue-free metals.



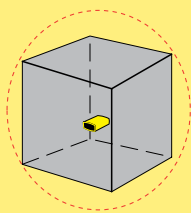
ZERUST® corrosion inhibitor diffusers go to work in minutes to saturate enclosures with protective VCI molecules.



ZERUST® Corrosion Inhibitor Diffuser Installation Guide

ZERUST® Vapor Diffusers are easily installed in seconds without tools or specialized labor.

1. To activate, simply take the diffuser out of its packaging.
2. Note the installation date. Vapor Capsule products include a space to mark the date.
3. Place in the enclosure as close to the center as possible.
4. Make sure the diffuser has maximum surface space exposed for ideal diffusion.
5. Tightly seal the enclosure to restrict airflow.



The ideal location to obtain maximum coverage of protection from the diffuser is the center. This position may not be possible if the center is occupied.



Securely close the cabinet or enclosure to restrict airflow which traps protective vapors inside. Airflow removes the protective vapor from the space faster than the diffuser can release it. Visit www.zerust.com to view videos on how to use and install vapor diffusers.

ZERUST® Comprehensive Corrosion Solutions

ZERUST® delivers safe and effective corrosion solutions across the globe. ZERUST® has on-site representation in over 70 countries to provide seamless support wherever you need it. Have a challenging corrosion prevention need, such as overseas shipping or contending with corrosive environments? Contact ZERUST® for a comprehensive corrosion management solution to meet your needs.



ZERUST® Axxanol™ Spray-G rust preventative coating protects electronic control panels outdoors.



ZERUST® Flange Saver® covers protect pipe flanges from corrosion.



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Visit www.zerust.com for more information!

‡ DECLARATION

Corrosion protection claims are based on Northern Technologies International Corporation (NTIC) internal laboratory testing performed under controlled parameters on contaminate-free substrates. Real-world application corrosion protection duration on different substrates will vary and depends on factors such as, but not limited to, the application or use, environmental / storage conditions, surface cleanliness, type of substrates, and coating thickness (where applicable). The use of the term "Up to" in reference to time is defined as any time duration from zero up to a specified time frame, but in no event beyond the specified time frame. The use of the term "for years" is based on NTIC's experience with its products but is in no way guaranteed. The use of the term "Up to" in reference to volume is defined as any volume from zero up to a specified volume but in no event beyond the specified volume of protection. It is the customer's / user's obligation to evaluate product performance, corrosion protection duration, safety, and suitability for intended use within the scope advised in the data sheet and to comply with all applicable laws and regulations. **LIMITED WARRANTY/DISCLAIMER** Warranty is limited to the replacement of a product that fails to meet specifications. For full warranty and disclaimer information, visit www.zerust.com/warranty.

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