



Zerust[®] Vapor Capsule ZAK-M22

Zerust[®]/Excor[®] Vapor Capsule ZAK-M22 diffusers emit Vapor Corrosion Inhibitors (VCI) that protect against the causes of corrosion. The capsules provide targeted corrosion protection in hard-to-reach spaces and work synergistically with other Zerust[®] products. It's VCI chemistry works quickly and is effective at neutralizing contaminants. Use to protect electronics, electrical components and inside enclosures such as musical instrument cases and gun cases.

Each capsule has a unique serial number and QR code printed on the label. This feature used along with the Zerust[®] ZAP App allows the user to be notified of the initial installation location and replacement schedule. Visit www.zerust.com/resources/apps for more information or to download the App.



Scan QR code to view more information about the Zerust[®] App.

▶ Benefits

Fast-acting VCI protection

Unique QR code on every capsule and Zerust[®] ZAP App allows user to manage deployed capsules

Multimetal protection that neutralizes contaminants

Does not affect the circuit boards or sensitive components*

Suitable for new equipment and to protect the reliability of existing equipment

Application Examples

A Vapor Capsule protects an electronics enclosure from corrosion during operation.



Use the custom Zerust[®] App that's designed to notify the user of the initial installation location and replacement schedule.



Application Types

Storage
Shipping
During Operation
May be used with Zerust[®] Packaging

* When applied in spaces with a volume of less than 17.5 ft³ (0.5 m³), test before use to ensure compatibility with copper and bronze metals.

Technical Data

Product Information Zerust®/Excor® ZAK-M22 Vapor Capsules are VCI (Vapor Corrosion Inhibitor) diffusers.

Protection Type Multimetal protection for steel, iron, zinc and galvanized steel, copper, brass, bronze, aluminum (and alloys), nickel, tin, silver, and solder. Do not overload system†

Passed Corrosion Inhibition Tests DIN 60060-2-30 (Humidity Chamber)
NACE TM0208 - Vapor Inhibiting Ability (VIA)
DIN 50018 (Kesternich chamber SO₂ test)

Storage Store in a cool, dry place and away from sunlight for up to 2 years from the date of shipment.

† When applied in spaces with a volume of less than 17.5 ft³ (0.5 m³), test before use to ensure compatibility with copper and bronze metals.

Protection Capabilities*

Zerust® Product Name	Normal Environment** (below 0.2 ppm SO ₂)			Aggressive Environment** (at or above 0.2 ppm SO ₂)		
	Volume of Protection (Up To)	Radius of Protection (Up To)	Duration of Protection (Up To)	Volume of Protection (Up To)	Radius of Protection (Up To)	Duration of Protection (Up To)
ZAK-M22	35 ft ³ (1 m ³)	2 ft (60 cm)	2 years in tightly sealed enclosure	3.5 ft ³ (.1 m ³)	.2 ft (6 cm)	1 month in tightly sealed enclosure

Operating temperature: Up to 131°F (55°C)

Operating temp max adhesion of tape is 165°F (73°C)

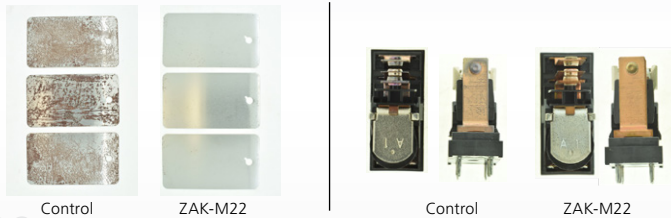
* Protection ratings are based on the highest average tested protection properties and are not guaranteed. Results may vary according to usage environment and metal surface properties such as contaminants.

**Normal environment (below 0.2 ppm SO₂) defined as warehouses, light industrial areas, and shipping and storage in sealed packaging or enclosures. Aggressive environment (at or above 0.2 ppm SO₂) defined as areas located in the vicinity of salts and acid gases such as oceans, petrochemical sites, wastewater treatment and pulp-paper plants or in enclosures that are not well sealed.

Note: For enclosure containing both ferrous (steel, iron, cast) and non-ferrous (aluminum, zinc, copper, brass, etc.) metals, use no more than prescribed. For enclosure containing only ferrous metals, add more capsules for better corrosion protection in aggressive environments.

Sample of Lab Test Results

ZAK-M22 showed protection against limited HCl, SO₂, H₂S in the environment and chloride contaminants at different levels on the surface of metals. (Test conditions and results available upon request).



Results at 70 ppm* of chloride

*ppm of chloride concentration sprayed on panels

Results at 37 ppm H₂S

Volume of protection: 0.134 ft³ (0.0038 m³)

DECLARATION

This Data sheet and information it contains is considered to be accurate at the date of printing. No representation or warranty, expressed or implied is made as to the accuracy or completeness of the data and information contained in this publication. It is the User's obligation to evaluate and use products safely and within the scope advised in the data sheet and to comply with all applicable laws and regulations.

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Availability

Zerust® ZAK-M22 Vapor Capsules are in stock for immediate delivery. Sold in cases. Made in the USA.

Part Number: 375-M-00202

Model ZAK-M22
Units/Case 10

Removal

When removing or replacing the capsule, insert a flat scraping object between the tape and surface to cleanly remove.



Safety

- Do not disassemble. Keep away from children. Safe for people. This product does not pose a health hazard to users due to its classification as an article according to UN GHS, US OSHA HazCom and CA WHMIS regulations. Check REACH SDS for classification in EU.
- Zerust® VCI chemistry is safe for sensitive electronics. No galvanic effects, residues or changes in the properties of metals. The protective molecules dissipate upon opening of enclosure.

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