

ZERUST[®] Zeriol[™] MCV-F-200

Technical Data Sheet



Product Description

ZERUST[®] Zeriol[®] MCV-F-200 is an oil-based corrosion preventive that combines contact inhibition with Vapor Corrosion Inhibitor (VCI) technology to provide both contact and vapor-delivered corrosion protection for internal metal components in sealed environments. It may be applied as a thin oil film or used as a lubricant oil additive for preservation during storage, shipment, or layup. When properly applied in sealed systems, including oil-filled preservation, Zeriol[®] MCV-F-200 provides multi-year corrosion protection*; unsealed systems are not recommended.

Typical Applications*

Direct Application (Spray / Fog / Mist)

- Closed piping, vessels, compressors, rotating equipment, and sealed skid packages
- Valves, spares, machined components, pump sets, and gearboxes
- Post-hydrotest or dry layup preservation prior to commissioning

Lubricant Oil Additive (Preservation Use)

- Engines, compressors, gearboxes, and hydraulic systems during storage or shipment
- Oil-lubricated systems requiring protection of wetted surfaces and vapor space

Key Advantages

- Combined contact oil film and VCI vapor protection
- Vapor-delivered action protects enclosed voids and crevices
- Suitable for fogging large enclosed volumes
- Compatible with many lubricating and hydraulic oils (verify prior to use)
- High flash point; barium- and heavy-metal-free
- Removable by oil change or conventional alkaline or solvent cleaning
- Performance validated by internal laboratory testing (ASTM D1748, ASTM B117)**

Operating Summary

Spray /Fog Application

- Clean and dry internal surfaces; remove all free water.
- Apply by spray, mist, or fog at 200 mL per m³ internal free volume (baseline).
- Use low-pressure air or nitrogen to distribute product.
- Seal all openings to retain VCI vapor (nitrogen blanket optional).
- Record dosage, treated volume, and preservation date.

Lubricant Oil Additive Application

Zeriol[®] MCV-F-200 may be blended into compatible lubricating or hydraulic oils to provide combined contact and vapor-delivered corrosion protection during storage or layup.

- Typical addition rate: 3% v/v (consult ZERUST[®] for alternate rates)
- Blend into new or clean oil prior to filling
- Do not add concentrate directly to operating equipment
- Fill and circulate or rotate components to ensure distribution
- Seal system to allow vapor saturation

* Please contact a ZERUST[®] representative for specific dosage, application equipment guidance and recommendations.

** Performance indicators are based on internal laboratory testing under controlled conditions and are provided for comparative reference only. Results are not specifications and may vary with application, environment, surface condition, and sealing effectiveness. Typical results include ASTM D1748 Humidity (~2,000 h) and ASTM B117 Salt Spray (~40 h).

Scan QR for more



product information

ZERUST® Zeriol™ MCV-F-200

Technical Data Sheet



Typical Properties

Properties***	Details
Appearance	Amber oil; dries to clear, thin, oily film
Substrate	Multimetal protection
Kinematic viscosity	≈ 22.1 cSt @ 40 °C
Flash point (PMCC)	≈ 120 °C (248 °F)
VOC (EPA Method 24)	≈ 63 g/L (0.53 lb/gal)
Application temperature	Ambient to ≈ 40 °C (110 °F)
Dosage (spray/fog)* baseline guide	200 mL per m ³ internal free volume
Dosage (lubricant addition)	3% v/v of sump capacity
Wet film thickness (WFT)	≈ 50 μm (2 mil)

***Typical values are not meant to be a specification.

Availability

Contact a ZERUST® representative for ordering information.

Product Number	Unit of Measure****
350-M-00123PL	5 gal (19 L) pail
350-M-00123DR	55 gal (208 L) drum

****Product sold in US customary units. Metric units approximate.

Storage

Store at 10-32 °C (50-90 °F) in sealed original containers. Protect from direct sunlight. Typical shelf life ~2 years. Refer to SDS for handling and safety guidance.

† 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.

©2013-2025 Northern Technologies International Corporation (NTIC). All Rights Reserved. NTIC is the owner of the following trademarks: ActivPak, Cor Tab, EXCOR®, Flange Saver, ICT™, Natur-VCI®, NTIO, Plastabs, Z-CISO, Zerion, ZERUST®, 5alf-111i, Z-PAK0 and the Color "Yellow", ABRIGO®, UNICO®, and VALENO® are registered trademarks of EXCOR GmbH, a Joint Venture Partner of NTIC.

Contact Us



Scan QR Code

A product of:
 Northern Technologies
 International Corp
 4201 Woodland Road
 Circle Pines, MN 55014 USA
 Toll-Free: +1 (800) 328-2433
www.ZerustIS.com



With over 50 years of experience, ZERUST Integrity Solutions®, a division of Northern Technologies International Corporation (NTIC), creates unique inhibitor-based corrosion prevention solutions to serve terminals, pipelines, exploration and production, equipment suppliers, transportation sectors, and more.

ZERUST Integrity Solutions, ZERUST®/EXCOR®, and Natur-Tec® are sister companies under NTIC.

