

ZERUST® Zerion™ FVS

Technical Data Sheet

Product Description

ZERUST® Zerion™ FVS is a cutting-edge corrosion inhibitor designed to protect ferrous metals in aggressive environments with water, moisture, or water ingress. It offers best-in-class dual-action protection through:

Vapor Corrosion Inhibitors (VCIs): Shielding air space voids, exposed metal surfaces, welded joints, crevices, and coating holidays. **Soluble Corrosion Inhibitors (SCIs):** Neutralizing corrosion caused by moisture or water ingress.

This powerful combination penetrates gaps and interstices in enclosed voids, delivering comprehensive protection.

Typical Applications

- Aboveground Storage Tank Soil Side Bottoms: Diluted or powdered ZERUST® Zerion™ FVS protects tank bottoms during construction, refurbishment, or on concrete pads. VCI Ring system is available for installations without liquid injection.
- Pipe Casing and Pipeline Preservation: Corrosion inhibitors and gels protect carrier pipelines using Soluble and Vapor Corrosion Inhibitors.
- Protection of Voids/Enclosures: Provides up to 2 years of protection[†] for exposed steel in large voids or enclosures using solution or powder.
- Hydrostatic Testing: ZERUST® Zerion™ FVS protects steel surfaces, air pockets, and voids during testing; compatible with DI, RO, or low-chlorine water.
- Offshore Structure Preservation: Delivers long-term corrosion protection for offshore structures in harsh environments.
- Additional Applications: Effective for enclosure protection, hydrostatic testing of complex systems, and preserving critical infrastructure.

Key Advantages

- Dual-Action Protection
- Comprehensive Coverage
- · Versatile Application Methods
- Long-Term Protection
- Cost-Effective Solution
- Environmental Compatibility

Operating Summary

- Mix ZERUST® Zerion™ FVS thoroughly with water until fully dissolved. The concentration depends on factors such as the duration of
 exposure, asset condition, and water quality.
- Apply the solution to the asset as specified in the Scope of Work. A ZERUST® Field Engineer can be assigned to oversee the
 operation.
- Dispose of any unused solution and containers in accordance with local, regional, national, and international regulations.

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





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Typical Properties

Properties*	Details	
Appearance	White powder	
Substrate	Ferrous	
рН	9 - 9.5 (1% in water)	

^{*} Typical values are not meant to be a specification.

Availability

Contact a ZERUST® representative for ordering information.

Product Name	Product Number	Unit of Measure**	Application Guide
ZERUST® Zerion™ FVS	460-F-00001	33lb (15kg) pail	Dilute with water** to use as slurry. Mixing ration of 0.5% to 15% (w/v) depending on application.
ZERUST® Zerion™ FVS	460-F-00001DR	55 gal, 340 lb (154.22 KG) drum	
ZERUST® Zerion™ FVS	460-F-00001TT	275 gal, 1,360 lb (616.89 KG) tote	
ZERUST® Zerion™ FVS-S2	375-F-00204	Sachet (10 sachets per box)	Place securely in the center of the void and ensure a tight seal. Provides protection for approximately 2–3 m³ of volume.*
ZERUST® Zerion™ FVS-S10	375-F-00200	20mm (0.75in) dia. x 1m (8 each / pail)	Place in center of void and seal tightly. Provides approximately 3.1m3 volume* of protection.
ZERUST® Zerion™ FVS-S15	375-F-00202	Sleeve Assembly - 20mm (0.75in) dia. x1.5m (1 assembly of 30 sleeves)	Designed for use with Inhibitor Delivery System solutions. Contact a ZERUST® representative for details.

^{**}Product sold in US customary units. Metric units approximate.

Storage

Store in original packaging in a dry, well-ventilated area at room temperature; keep tightly closed for a shelf life of 36 months, unopened.

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 "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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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.

