

Technical Data Sheet

ZERUST®/EXCOR® AxxaCoat™ 93B HFS is a sprayable high-flash rust preventative coating designed to protect large surfaces during operation and downtime where a tough yet removable coating is essential. Use AxxaCoat™ 93B HFS to safely protect storage tank walls, pipelines, building infrastructures, bridges, and other large structures for up to 2 years[‡] when outdoors or for many years[‡] when indoors. For smaller assets, such as metal parts and assemblies that require protection during long-term indoor and outdoor storage or challenging overseas shipping applications, ZERUST® AxxaCoat™ 90B HFS is recommended.

When used indoors, AxxaCoat™ 93B HFS coating dries to form a slightly tacky, matte black film. However, when used outdoors and exposed to solar radiation, the coating will cure to a hard, dry-to-the-touch, matte black film. Should the need arise to remove the coating, use mineral spirits or kerosene. For an optimal corrosion management solution tailored to your metal assets, we encourage consulting with a ZERUST®/EXCOR® representative.

For over 50 years, beginning with the invention of Vapor Corrosion Inhibiting (VCI) film packaging, ZERUST® has led the market in quality corrosion solution products. We are dedicated to providing expert corrosion management services and broadening the range of corrosion solutions for our customers. In addition, ZERUST® users have access to on-site support from ZERUST®/EXCOR® representatives in more than 70 countries. As a result, our customers have peace of mind when they choose ZERUST® for corrosion control management.

Typical Properties

Black thixotropic mixture dries to form a slightly tacky, matte black film. However, when used outdoors **Appearance** and exposed to solar radiation, the coating cures to a hard, dry-to-the-touch, matte black film.

Substrates Multimetal protection

Coverage* $107 \text{ ft}^2 - 267 \text{ ft}^2 \text{ per gal}$

Wet film thickness (WFT) Apply $6 - 15 \text{ mil} (150 - 375 \,\mu)$ for indoor protection, or $9 - 15 \text{ mil} (225 - 375 \,\mu)$ for outdoor protection

 $2.1 - 5.25 \text{ mil } (52.5 - 131.25 \,\mu)$ when fully cured Dry film thickness

Time between successive coats 2 hrs @ 77°F (25°C)

Cure time (3 – 6 mil WFT)** 48 – 72 hrs @ 77°F (25°C), or 1 – 2 hrs @ 140°F (60°C) & <75% RH

VOC content EPA Method 24 2.93 lb/gal (351 g/L) 140°F (60°C) Flashpoint ASTM D93 0.86 - 0.88 g/cm³ Density

150 – 250 cPs @ 50RPM, spindle 61 @ 77°F (25°C) Viscosity

*The theoretical coverage estimates, based on the stated wet film thicknesses (WFT), should only be used as a guide. These estimates were generated based on internal lab measurements of product coating on flat, smooth 1010 steel stock. Actual coverage data will vary in actual use based on the method of application, type of equipment used, part geometry, surface roughness, drain-off time, drag-out rate, evaporative loss, etc.

**Coating may be slightly tacky to the touch. Coatings exposed to solar radiation will cure to a hard, dry-to-the-touch surface.

This data sheet provides general guidelines for operation, application, and removal. Please contact your ZERUST®/EXCOR® account representative for more specific recommendations on your particular operation and conditions.

Operating Summary

- Ready-to-use solvent cutback, general-purpose rust preventive compound.
- Typical application temperature: apply in environment and on surfaces between $50 120^{\circ}F$ ($10 49^{\circ}C$).
- See Safety Data Sheet (SDS) section 7 for safe handling recommendations.
- Fully cured product is temperature tolerant up to 300°F (150°C).

Application Technologies

Can be used in spray, brush, or immersion processes.

Product Removal

AxxaCoat™ 93B HFS can be removed from the metal surface with the use of mineral spirits or kerosene.



Availability

ZERUST®/EXCOR® AxxaCoat™ 93B HFS is sold as a ready-to-use liquid product. Contact your ZERUST®/EXCOR® representative for ordering information.

Part Number	Quantity*
350-M-00090PL	5 Gal (19 L) Pail
350-M-00090DR	55 Gal (208 L) Drum

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

Protection Info[‡]

Indoor (unpackaged)*

Outdoor*

Humidity ASTM D1748

Salt spray ASTM B117

UV resistance ASTM G154-C7

Wind driven rain ASTM D6004

For many years*

Up to 3 years*

Up to 1,320 hours*

Up to 1,000 hours*

Up to 4,000 hours*

Wind-driven rain ASTM D6904 Pass (steel)*
Cold temperature ASTM D522 Pass*

Compatible with packaging Check before use

Storage

- Store in a cool, dry place and away from sunlight in the original packaging.
- Optimal storage temperature is 50 95°F (10 35°C) for up to 2 years from the date of shipment.
- If the product freezes, bring it to room temperature and mix well.
- Reseal or close the container cap after each use. The product will dry and thicken in an open container.

Disposal

- Collect waste when removing.
- Dispose of in accordance with local, national, and international regulations.

Precautions

- Mix the product very well before decanting or using.
- Do not dilute the product unless directed by your ZERUST®/EXCOR® account representative.
- This is NOT a lubricant. Do not use in place of oils or grease where lubrication, low torque, or low friction surfaces are required.
- Avoid placing metal surfaces in direct contact with wood or cardboard (sources of moisture and acid).
- Apply in a well-ventilated area to clean and dry metals.
- Avoid open flame or ignition sources during the application or near partially dry coating.
- Remains tacky when coated parts are stored at >75% RH indoors. Once fully cured by solar radiation, the coating will not become tacky when exposed to high humidity levels.
- Wear personal protective equipment as stipulated in the Safety Data Sheet (SDS).
- Refer to SDS for more safety 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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^{*}ASTM D1748, B117, G154-C7, D6904, and D522 data is based on 2 mil dry film thickness (DFT) coating tested on 1010 Steel panels with 0.5 – 1.65 micron Ra roughness.