Axxatec™ DA-40AL

Technical Data Sheet

ZERUST®/EXCOR® Axxatec™ (Dual-Action) DA-40AL is a hard water compatible, water-based, low-foaming liquid concentrate rust preventative and light-duty cleaner designed to provide up to 3 months‡ of indoor storage and in-transit protection. In addition to ferrous metal protection, Axxatec™ DA-40AL is also compatible with yellow metals and aluminum alloys.

When applied and dried, it leaves a safe, clear, dry-to-touch protective coating. As a result, Axxatec™ DA-40AL coated and dried parts are safe to handle, and end users do not need to wear personal protective equipment such as a respirator, mask, or safety glasses, making it safer and more economical to use than solvent-based systems. Even though gloves are not mandatory, we recommend using clean gloves without lint or talc to keep metals free of contaminants. After allowing metals to completely dry, place them into ZERUST® Vapor Corrosion Inhibitor (VCI) film packaging products for a more robust solution that protects for years‡ during indoor storage or challenging shipping conditions, such as ocean freight. Axxatec™ DA-40AL does not contain solvent, silicates, or phosphates, is non-flammable, complies with Global Automotive Declarable Substance, TSCA, SVHC, RoHS, and REACH requirements, and is environmentally friendly.

For over 50 years, beginning with the invention of Vapor Corrosion Inhibiting (VCI) film packaging, ZERUST®/EXCOR® has led the market in quality corrosion solution products. In addition to ZERUST® VCI film and other packaging products, ZERUST® offers an increasing range of cost-effective, high-performance wash fluids and rust preventative products. These products are formulated to work synergistically together to provide enhanced, comprehensive corrosion solutions for our customers. Backed by our global expert technical support and testing services, a comprehensive corrosion management program can be designed and deployed to meet individual customer's needs.

Typical Properties

Appearance	Amber liquid
Surface finish	Clear, dry-to-touch
Substrates	Ferrous protection. Compatible with yellow metals and aluminum alloys.
VOC content EPA Method 24 (concentrate)	0.13 lb/gal (16 g/L)
Freeze point	16.7°F (-8.5°C)
pH (concentrate)	8.5 – 9.5
pH (5% solution)	8 – 9

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

- Dilute between 3 – 10% in water.
- Typical immersion/ultrasonic application operating temperature: 72 – 140°F (22 – 60°C).
- Typical spray application operating temperature: 100 – 140°F (38 – 60°C).
- Deionized or reverse osmosis water is recommended for bath makeup and rinsing to improve bath life and reduce corrosion potential.

Application Technologies

- Can be used in immersion, ultrasonic, or spray processes.

Product Removal

- Axxatec™ DA-40AL can be rinsed and removed from the metal surface with the use of purified water (RO, D/I, Distilled) or a compatible ZERUST® AxxaWash™ product.
- City water may be used, but care should be used as chlorides and hard water (calcium and magnesium) in tap water can have negative effects in most operations.

Product Control

Axxatec™ DA-40AL is controlled by titration. To test the concentration:

- Pipette a 10 mL sample of the bath solution into a beaker.
- Add 50 mLs of DI, RO, or distilled water.
- Add 10 drops of bromocresol green indicator solution. The solution should turn green.
- Titrate with 0.1 N hydrochloric or sulfuric acid until the color turns yellow.
- Use the following table to determine concentration.

Scan QR for more

product information and photos

% Axxatec™ DA-40AL	Titrant Volume (mLs)
1	1.85
3	5.15
5	8.82
7	12.1
9	15.7

Availability

ZERUST®/EXCOR® Axxatec™ DA-40AL is sold as a liquid concentration. Contact your ZERUST®/EXCOR® representative for ordering information.

Part Number	Quantity*
350-M-00096PL	5 Gal (19 L) Pail
350-M-00096DR	55 Gal (208 L) Drum
350-M-00096TT	275 Gal (1041 L) Tote

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

Protection Info‡

Indoor (unpackaged)‡	Up to 3 months‡
Indoor (w/ ZERUST® VCI packaging)‡	For years‡
Outdoor‡	Not recommended
Compatible with packaging	Yes

Storage

- Store in a cool, dry place and away from sunlight in the original packaging.
- Optimal storage temperature is 40 – 100°F (4 – 38°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.

Disposal

- Dispose of in accordance with local, national, and international regulations.
- Product in an unopened original container prior to use does not meet criteria for hazardous waste according to 40 CFR 261 (no components listed on F, K, P, or U lists; not ignitable, not corrosive, not reactive, and not toxic).

Precautions

- Always mix well before use.
- Deionized or reverse osmosis water is recommended for bath makeup and rinsing to improve bath life and reduce corrosion potential.
- Avoid placing metal surfaces in direct contact with wood or cardboard (sources of moisture and acid).
- Avoid contact with eyes and skin.
- Provide adequate ventilation to minimize vapor concentrations.
- Do not breathe mist, spray, or vapors.
- 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.

©2013-2025 Northern Technologies International Corporation (NTIC). All Rights Reserved. NTIC is the owner of the following trademarks: ActivPak®, Cor Tab®, EXCOR®, Flange Saver®, ICB®, ICT®, Natur-VCI®, NTI®, Plastabs®, Z-CIS®, Zerion®, ZERUST®, 洁乐特, Z-PAK® and the Color "Yellow". ABRIGO®, UNICO®, ICB®, and VALENO® are registered trademarks of EXCOR GmbH, a Joint Venture Partner of NTIC.

A product of:
Northern Technologies International Corp
4201 Woodland Road
Circle Pines, MN 55014
USA

Phone. +1 763.225.6600
Fax. +1 763.225.6645
sales@zerust.com
www.zerust.com