



# ICT®520-CB1 Anti-Tarnish Film

## Technical Data Sheet

ZERUST®/EXCOR® ICT®520-CB1 Anti-Tarnish Film blocks corrosion-causing acid gases before they reach and damage sensitive metal surfaces in shipping, storage, and work-in-progress. Impregnated with ZERUST® acid-gas scavengers, ICT®520-CB1 Anti-Tarnish films and bags protect silver and yellow metals such as copper, bronze, brass, and tin from the detrimental effects of oxidation and tarnish without leaving residue, preserving the functionality and aesthetic appeal of the protected items.

Ideal for safeguarding valuable silver items, copper wiring, electronic components, and musical instrument strings, ICT®520-CB1 protects for years†. When used with other ZERUST® Vapor Corrosion Inhibitor (VCI) products, it will provide added protection for all metal types while preventing acid gases from entering the packaging. Compared to alternatives like foil or copper particle-infused films, the Anti-Tarnish Film stands out for its cost-effectiveness, compatibility with automated packaging systems, and transparency. Engineered for a broad range of applications, ICT®520-CB1 is available in various packaging types, including rolls, sheets, tubing, and bags, customizable in color, and additives such UV stabilizers, anti-block, slip, and anti-static additives to meet specific customer preferences, ensuring an ideal packaging solution. Whether in storage or transit, ZERUST® ICT®520-CB1 Anti-Tarnish Film delivers unparalleled performance.

ZERUST® is the inventor of poly VCI technology, and ZERUST® VCI film has proven its performance and safety with thousands of customers worldwide for over 50 years. It is used to protect valuable metal items for manufacturers in industries such as automotive, agricultural, aerospace, and mining. ZERUST®/EXCOR® offers on-site support and service in more than 70 countries via a network of 21 joint venture partnerships. Check with your ZERUST®/EXCOR® representative for a comprehensive corrosion management solution that is most effective for your metal assets.

### Typical Properties

Appearance      Typical color is transparent. Additional colors available are upon request. Subject to order minimums.  
Substrates        Protects silver, copper, bronze, brass, and tin from oxidation and tarnish.

Property	Direction (Machine or Transverse)	ICT®520-CB1 Anti-Tarnish Film*	ASTM Test Method
Film Thickness	-	4 mil (102 µm)	D-6988
Dart Impact Resistance	-	300 g	D-1709
Elmendorf Tear Strength	MD	1100.8 gf	D-1922
	TD	668.8 gf	
Tensile Strength at Break	MD	21.0 MPa (3045 psi)	D-882
	TD	20.1 MPa (2917 psi)	
Elongation at Break	MD	560 %	D-882
	TD	610 %	
Water Vapor Transmission Rate	-	0.06 (g/100 in² day) @73°F (23°C), 90% RH	F-1249
Vapor Inhibiting Ability (VIA)	-	Pass (w/ VCI additive)	NACE TM0208

\* Typical values, not meant to be a specification.

***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

- Pack only clean and dry parts.
- Always wear clean and dry gloves when handling the metal parts to protect them from corrosion-causing fingerprints.
- When packing, the temperature of the metal parts should be about the same as the room temperature to avoid condensed moisture.
- Tightly close packages with tape, heat seal, zip ties, or fold over.
- Insert additional ZERUST® materials (such as ICT®420-35 VCI Kraft Paper) as interleave for added protection for all metal types in larger and tightly packed or layered packages.
- Avoid placing metal surfaces in direct contact with wood or cardboard (sources of moisture and acid).



product information and photos

## Availability

ZERUST®/EXCOR® ICT®520-CB1 Anti-Tarnish Film is a made-to-order product available upon request in 2 – 6 mil thicknesses with options such as VCI, UV stabilizers, anti-block, slip, and anti-static additives, subject to minimum order quantities. Contact your ZERUST®/EXCOR® representative for ordering information.

### Size ranges (width):

Bags & Tubing:

2" - 125" (flat)

2" - 150" (gusset)

Sheeting:

2" - 26'

## Protection Info‡

Indoor‡ Protects clean metals for years‡ when used correctly.

Outdoor‡ Not recommended

## Storage

- Store in a cool, dry place and away from sunlight in the original packaging for up to 3 years from the date of shipment.

## Disposal

- Check on options for recycling and incineration.
- Dispose of in accordance with local, national, and international regulations.

## Precautions

- Do not use for outdoor protection.
- Safe for people. This product does not pose a health hazard to users due to its classification as an article according to EU REACH, UN GHS, US OSHA HazCom, CLP, and CA WHMIS regulations.
- Refer to the Safety Data Sheet (SDS) for 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](http://www.zerust.com/warranty).

©2013-2024 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®, NTI®, Plastabs®, Z-CIS®, Zerion®, ZERUST®, 洁乐特®, Z-PAK® and the Color "Yellow". ABRIGO®, UNICO®, 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](mailto:sales@zerust.com)  
[www.zerust.com](http://www.zerust.com)

Rev A

