

ICT®520-CSL Cold Seal VCI Film

Technical Data Sheet

ZERUST®/EXCOR® ICT®520-CSL Cold Seal VCI is an easy-to-use cold adhesive film that provides cost-effective and versatile protection against corrosion damage for metals in shipping, storage, and work-in-progress. ICT®520-CSL streamlines packaging operations by removing the need for heat sealing, taping, or stapling, saving time, equipment, and labor. Its unique self-adhesive property allows the film to bond to itself, forming a secure closure within seconds without leaving any residue on the protected items. ICT®520-CSL VCI Film diffuses invisible, odorless, and non-toxic ZERUST® Contact and Vapor Corrosion Inhibitors (VCI) that settle onto exposed metal surfaces inside the packaging or enclosure. Upon removal from the packaging, the VCI will dissipate from the metal surface, allowing immediate painting, welding, or further processing.

Use ZERUST® Cold Seal Film to protect bare metal parts, such as gears, differential units, axle ends, and more, from rust and corrosion for years[†]. For additional protection in challenging environments, ZERUST® VCI Film may be used with ZERUST® VCI diffuser products. Engineered for a broad range of applications, ICT®520-CSL is available in a multimetal protection formulation with custom sizes, ensuring an ideal packaging solution. Whether in storage or transit, ZERUST® ICT®520-CSL Cold Seal VCI 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 clear. Additional colors are available upon request. Subject to order minimums.
 Substrates Available in multimetal protection formulation. Other protection formulations are available upon request.

Property	Direction (Machine or Transverse)	ICT®520-CSL Cold Seal VCI Film*	ASTM Test Method
Film Thickness	-	4 mil (102 µm)	D-6988
Dart Impact Resistance	-	300 g	D-1709
Tear Strength	MD	272 gf	D-1938
	TD	294 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 in ² day) @73°F (23°C), 90% RH	F-1249
Vapor Inhibiting Ability (VIA)	-	Pass	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 by pressing the Cold Seal VCI Film down onto the parts or folding over and pressing the film together. The film bonds only to itself and will not adhere to or leave a residue on the product that is being protected.
- Insert additional ZERUST® materials (such as ICT®420-35 VCI Kraft Paper) as interleave for added protection in larger and tightly packed or layered packages.
- Avoid placing metal surfaces in direct contact with wood or cardboard (sources of moisture and acid).

Scan QR for more



product information
and photos

Availability

ZERUST®/EXCOR® ICT®520-CSL Cold Seal VCI Film is a made-to-order product available upon request with options in 3 – 6 mil Thicknesses with options, subject to minimum order quantities. Contact your ZERUST®/EXCOR® representative for ordering information.

Size ranges (width):

Sheeting:

2" – 36"

Perforated or non-perforated

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.

©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®, 浩乐特, Z-PAK® and the Color "Yellow". ABRIGO®, UNICO®, ICB®, and VALENO® are registered trademarks of EXCOR GmbH, a Joint Venture Partner of NTIC.