

ICT®510-SM Stretch VCI Film

Technical Data Sheet

ZERUST®/EXCOR® ICT®510-SM Stretch VCI Film is a high-quality cast packaging film that wraps pallet loads, bundles, large items, and irregularly shaped metal objects during storage and shipping. The stretch wrap's high-stretch tension enables it to form around objects and assures tear resistance and load stability in transit with its superior elastic stretch memory. Available in both ferrous and multimetal formulations, ICT®510-SM Stretch VCI Film diffuses invisible, odorless, and non-toxic ZERUST® Vapor Corrosion Inhibitors (VCI) that settle onto exposed metal surfaces inside the packaging. Upon removal from the packaging, the VCI will dissipate from the metal surface, allowing immediate painting, welding, or further processing.

Use ZERUST® Stretch VCI Film to protect metal components, machined and cast parts, engines, molds, and more from rust and corrosion for up to 1 year*. For additional protection in challenging environments, ZERUST® VCI Film may be used with ZERUST® rust inhibitors, preventatives, coatings, or VCI diffuser products. Engineered for a broad range of applications, ICT®510-SM Stretch VCI Film is ideal for use with machine-stretch applications, and smaller rolls are also available for hand-stretch applications. Whether in storage or transit, ZERUST® ICT®510-SM Stretch 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 colors are yellow or blue. Additional colors are available upon request. Subject to order minimums.
Substrates Available in ferrous and multimetal protection formulations.

Property	Direction (Machine or Transverse)	ICT®510-SM Stretch VCI Film*		ASTM Test Method
Film Thickness	-	100 gauge (1 mil)	125 gauge (1.25 mil)	D-6988
Cling Type	-	Differential, Cling + VCI side in	Differential, Cling + VCI side in	-
Pre-stretch Percent	-	Up to 250%	Up to 250%	-
Dart Impact Resistance	-	130 g	150 g	D-1709
Elmendorf Tear Strength	MD	190 gf	330 gf	D-1922
	TD	350 gf	900 gf	
Tensile Strength at Break	MD	45.0 MPa (6526 psi)	47.57 MPa (6899 psi)	D-882
	TD	28.0 MPa (4061 psi)	39.99 MPa (5800 psi)	
Elongation at Break	MD	520 %	700 %	D-882
	TD	780 %	950 %	
Vapor Inhibiting Ability (VIA)	-	Pass	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 wrapping, the temperature of the metal parts should be about the same as the room temperature to avoid condensed moisture.
- 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®510-SM Stretch VCI Film is available in many stock options and has non-stock options, such as UV and anti-static additives, subject to minimum order quantities. ZERUST® ICT®510-SM VCI Films are manufactured with at least 10% recycled plastic, helping support environmental compliance requirements and meet global sustainability expectations. Contact your ZERUST®/EXCOR® representative for ordering information.

Part Number	Metal Type	Application Type	Quantity
250-F-00006	Ferrous	Hand	4" x 667' x 125 ga. Hand Rolls (12/Case)
250-F-00002	Ferrous	Machine	20" x 4000' x 125 ga. Roll
250-M-00005	Multimetal	Hand	18" x 1500' x 100 ga. Rolls (4/Case)
250-M-00004	Multimetal	Machine	20" x 4500' x 100 ga. Roll

Protection Info†

Indoor† Protects clean metals for up to 1 year† 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.

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