ZERUST 📢 EXCOR



The Zerust[®]/Excor[®] Natur-VCI[™] series is an internationally certified fully biodegradable and compostable Volatile Corrosion Inhibiting (VCI) packaging material designed to protect metal components from rust and corrosion during shipment and short-term storage.

Zerust Natur-VCI products, with a thickness of 60 microns (2.3 mil) or less, pass the NACE Standard TM0208 VCI Corrosion Protection Test to Level 3, but also meet international standards for compostable plastics including ASTM D6400, EN 13432, ISO 17088 and AS4736 and are certified 100% compostable by organizations including the Biodegradable Products Institute (BPI), TÜV Austria, 'OK Compost' and the Australian Bioplastics Association (ABA).

End of Life Disposal

Natur-VCI film is engineered for safe disposal in a professionally managed composting facility, where the carbon in the film is utilized as a food source BPI by micro-organisms to completely break-down the plastic into humus, water and CO₂. The resulting humus can be used as a natural fertilizer and/or soil amendment in agriculture. Natur-VCI film meets all stringent requirements of international standards for compostable plastics including EN 13432, ASTM D6400 and ISO 17088.



Carbon Savings

Replacing one ton (1,000 kg) of conventional polyethylene plastic VCI packaging with Natur-VCI, the following equivalent environmental benefits are achieved.*



118 ton reduction in CO.

emissions for every 1 ton

(1000 kg) of VCI film



Reduction in CO. emissions equivalent to 25 cars driven for a vear for every 1 Ton (1000 kg) of VCI film



to the consumption

of 50.262 Liters of

emissions equivalent gasoline for every 1 Ton (1000 kg) of VCI film VCI film



Reduction in CO. emissions equivalent to the carbon sequestered by 1,951 tree seedlings grown for 10 years for every 1 Ton (1000 kg) of



Fully biodegradable/compostable

Powerful and safe* corrosion protection and packaging combined in one step

Provides enhanced mechanical performance properties in terms of tensile strength, resistance to tearing, elongation at tear and puncture resistance in conformity with DIN EN ISO 527-3/2/200 and ASTM D1709/A. In many cases these properties allow the implementation of thinner films (i.e 2.3 mil rather than 4 mil), saving customers money and further reducing the environmental impact

Metals components are ready for use and assembly directly after being taken out of the packaging

Application Type

Storage Shipping Work in progress

*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 and CA WHMIS regulations.

*WARN MODEL. Source: US EPA Greenhouse Gas Equivalencies Calculator (as of September 2019)

Zerust®

Product Information

AppearanceTypical color is translucent green. available upon request. Subject to orderTypes of Metal ProtectedFerrous (steel, iron and alloys) and non- copper, brass, bronze, and galvanized).Protection LifeProtects clean dry metals for up to 6 r correctly.StorageStore in original packaging away from conditions below 85°F (30°C) and 50%	fully biodegradable corrosion inhibiting
Types of Metal ProtectedFerrous (steel, iron and alloys) and non- copper, brass, bronze, and galvanized).Protection LifeProtects clean dry metals for up to 6 r correctly.StorageStore in original packaging away from 	Additional colors er minimums.
Protection LifeProtects clean dry metals for up to 6 r correctly.StorageStore in original packaging away from conditions below 85°F (30°C) and 50%	-ferrous (aluminum,
StorageStore in original packaging away from conditions below 85°F (30°C) and 50%	months when used
from the date of shipment.	n direct sunlight in RH for up to 1 year

End of Life Disposal This product is intended to be disposed in an industrial composting facility after use in order to reduce environmental impact.

Property	Direction (Machine or Transverse)	Zerust Natur-VCI Film*	ASTM Test Method
Dart Impact Resistance	-	315 g	D-1709
Tear Strength	MD	414 gf	D-1938
	TD	586 gf	
Tensile Strength	MD	30.85 MPa	D-882
	TD	30.18 MPa	
Elongation at Break	MD	844.3%	D-882
	TD	811.8%	
Vapor Inhibiting Ability (VIA)	-	Pass	NACE TM0208- 2013

* Typical values, not meant to be a specification.

Please refer to the Safety Data Sheet and the Processing Guide for specific handling and processing instructions.

Warranty and Disclaimer Information: We guarantee our products conform to documented quality specifications. All statement, technical information and recommendations contained herein are based on testing and experiences NTIC believes to be reliable, but the accuracy or completeness thereof is not guaranteed. Product information subject to change without notice. We make no warranty of any kind expressed or implied as to the effects of use (including, but not limited to, damage or injury). For full warranty and disclaimer information visit, www.zerust.com/warranty.

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- Availability

Zerust/Excor Natur-VCI Film is a custom product. Contact a Zerust account manager for pricing and availability.



Do not use for:

- Outdoor protection,
- Components coated with rust preventative oils
- Components leaking or dripping with oils/fluids

Safety

- 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 and CA WHMIS regulations.
- Zerust VCI chemistry is safe for sensitive electronics. No galvanic effects, residues or changes in the properties of metals. The protective molecules dissipate upon opening of package.

