



# TECHNICAL DATASHEET

## **PRODUCT NAME – VCI METAL BARRIER**

### PRODUCT CODE – METBAR FILM 100 & 150

### **PRODUCT DESCRIPTION**

RUST-X VCI film is manufactured using a patented process and structure. The film is manufactured on a 3 layer, multilayer co-extrusion plant combined with a metalized barrier layer. The combined structure offers a very low oxygen and water vapor permeability combined with VCI properties.

The film comprises of total 4 layers. During the packaging process vacuuming out is not required, because the inner and middle function as VCI transmitting layers. Outermost layer serves as a barrier layer to control the uni-directional transfer of VCI chemicals as well as provide improved barrier properties to the film. The metal lised outer barrier layer laminated to the 3 Layer VCI Film provides higher strength as well as barrier to the water vapour and oxygen molecules.

The VCI molecules work by evaporation and condensation on the cooler metal parts and prevent corrosion wherever they settle. In effect a corrosion inhibiting layer comprising of macromolecules is deposited on the part. This works by preventing the forward reaction of corrosion by inhibiting electron flow, altering pH as well as by forming a physical barrier to oxygen and water vapour.

The bags can be formed into 3 dimensional covers for machines, Pallet liners as well as can be supplied in 2 Dimensional bags or sheet for packaging of parts.

These bags can be heat sealed using ordinary heat sealing machine or can also be provided with a self

sealable adhesive tape which can be removed to form a sealed packaging system. Due to the advanced VCI Action there is no need to vacuum the packaging as the moisture and air are treated with VCI.

### **FEATURES**

- Meets standard MIL B 131 where the product is fabric and fiber free.
- Heat sealable structure useful as a barrier material limiting passage through itself of solids, liquids, semisolids, gases or forms of energy such as ultraviolet light, said structure compromising a first play of a relatively tough
- Biaxial oriented film of organic polymer adhered to second ploy of metallic foil/coating and a third play of a tough polymer such as polyethylene.

### APPLICATIONS

- Machinery Packing
- Steel , Tube and Rod Packing
- Metal Tubes and wires

ROHS

- Stainless steel
- Copper and Aluminum sheets
- Wrapping metal bodies, engines, turbines, heavy equipment
- Wrapping castings, forgings, sheet metal





CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM

1400





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### **TECHNICAL DATA**

Physical Properties	Test Method	Value for 100 GSM	Value for 150 GSM
Basis Weight	ASTM D 646	100 gsm	150 gsm
Heat Seal Strength	ASTM F 88	2.6-3.5	2.6 – 3.5
Water Vapor Transmission Rate	ASTM 1429	<0.001	<0.001
Oxygen Transmission Rate	ASTM D 3985	<0.001	<0.001
рН		8-9	8-9
Corrosion Test	ASTM 1748	Pass 500 hrs	Pass 500 hrs
Colour Availability		Silver Outside Blue Inside	Silver outside Blue Inside
Tear Resistance (g)		1230/1470	1740/2085
Puncture resistance Load to Break – kg		10.2	15.6

### PACKAGING AND STORAGE

Store in a cool dry place and always keep VCI film wrapped when not in use.

### USEAGE

The product is used for packing of machines, auto parts, steel products etc. It is ideal to accompany Desiccants along with the bags to reduce humidity packed inside the packaging. Heat sealing of bag is

USA - 14310 Gannet St , La Mirada, California info@rustxusa.com www.rustxusa.com Italy | France | India | China | Mexico preferred to reduce any new moisture entering the packaging. 3 D bags or 2 D bags can be used as per the desired dimensions and components can be packed and sealed in VCI bags using heat sealer.

### **PRODUCT PICTURES**







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### DISPOSAL

Recommendation: Do not allow product to reach sewage system.

Disposal of product or waste must comply with official local regulations.

Packaging that cannot be recycled must be disposed in the same manner as the product.

### SAFETY INFORMATION

- Keep Out Of Reach Of Children
- Keep Container Tightly Closed
- Not For Internal Consumption
- Consult Material Safety Data Sheet For More
  Information
- 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.
- Rust-X VCI chemistry is safe for sensitive electronics.
- Rust-X VCI chemistry imposes No galvanic effects, residues or changes in the properties of metals. The protective molecules dissipate upon opening of package.

### **HEAVY METALS DECLARATION**

RUST-X Rust Preventive products do not contain Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr6), Polybrominated biphenyls (PBB), or Polybrominated di-phenylether complying with the re-stricted substances listed in Article 4(1) of the RoHS Directive. RUST-X Rust Preventive Oils are also REACH Compliant for exports to the European Union.

### DECLARATION

This Data sheet and information it contains is considered to be accurate at the date of printing. No representation or warranty, expressed or implied is made as to the accuracy or completeness of the data and information contained in this publication. It is the User's obligation to evaluate and use products safely and within the scope advised in the data sheet and to comply with all applicable laws and regulations

#### LIMITED WARRANTY

RoHS

**ECHA** 

All technical information statements. and recommendations contained herein are based on validations and tests conducted by HI TECH INTERNATIONAL/RUST-X or its partners and are believed to be reliable, but the accuracy or completeness thereof is not guaranteed. We warrant our products will be free from defects when shipped to customer. Our obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement product under this warranty, the customer must notify Rust-X, Hi Tech International or its partners or agent of the claimed defect within 3 months after shipment of

**DVR**M

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CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM





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product to customer. Customer shall pay all freight charges for replacement products. We shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products. And any financial claims shall be limited to the value of the film sold.

Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of the company. The foregoing warranty is exclusive and in lieu of all other warranties, express, implied or statutory, including without limitation any implied warranty of merchantability or of fitness for a particular purpose. In no case shall HI TECH INTERNATIONAL/RUST-X be liable for incidental or consequential damages.

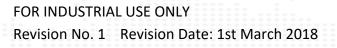
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