

### **Technical Datasheet**

**Product: VCI Metal Barrier** METBAR 100 & 150

TDS No. 400034

Publication Date: 1st April 2016

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### **RUST-X USA**

## **Your Global Corrosion Prevention Partner**

#### **Product Description**

RUST-X VCI film is manufactured using a patented process and structure. The film is manufactured on a 3 layer, multilayer coextrusion 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 watervapour.

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.

#### **Product & Application Images**





#### **Suitable For**

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.



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#### **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.

#### **Application**

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 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.

#### **Properties**

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**

#### Recommendation for Packaging: www.machinerypacking.com

Additionally RUST-X Desiccants can be added along with VCI Emitters to counteract the humidity effects.

RUST-X 40 Spray can be applied on all machined, unpainted and unprotected areas to prevent them from corrosion.



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#### **Disposal**

Wastes should be disposed off in accordance with local regulations.

**Recommendation:** Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

Packaging that may not be cleansed must be disposed off in the same manner as the product.

#### **Safety Information**

RUST-X Rust Preventive Oils donot 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

Revision No. 8 Revision Date: 1<sup>st</sup> April 2016