

# **RUST-X USA**

## **Technical Datasheet**

Product: VCI Aluminum Barrier AL BAR  
Grade: Compliance to MIL-PRF-131 J

TDS No. 400035  
Publication Date: 1<sup>st</sup> April 2016

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### 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 laminated outer barrier layers. The combined structure offers a very low oxygen and water vapor permeability combined with VCI properties. The film comprises of total 3 Layers which offer outstanding strength and very high barrier properties.

This is ideally used for packaging of food products or from equipment packaging for long term storage and transportation.

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. This film complies by MIL 131 Class 1 Specifications.

### 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.

### 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 comprising 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	Value
Basis Weight	ASTM D 646	110-	160-200gsm
Layer 1 PET		12 micron	12 micron
Layer 2 Aluminum		12 micron	12 micron
Layer 3 Film		90	130
Heat Seal Strength	ASTM F 88	2.6-3.5	2.6 – 3.5
Oil Resistance	MIL-STD-3015	Pass	Pass
Water Vapor Transmission Rate	MIL-STD-2017-	<0.0005	<0.0005
Oxygen Transmission Rate	ASTM D 3985	<0.0005	<0.0005
pH		8-9	8-9
Corrosion Test	ASTM 1748	Pass 500	Pass 500 hrs
Colour Availability		Silver Outside Transparent	Silver Outside Transparent Inside
Tear Resistance (g)		1230/1470	1740/2085
Puncture resistance		10.2	15.6
Load to Break – kg		PASS	

### 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 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

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