VCI-120 Patented

**PRODUCT DESCRIPTION**
VCI-120 is a clear skin film that contains multimetal volatile corrosion inhibitors (VCIs). The VCIs volatilize from the film and fill in the enclosed area. They then condense on all exposed metal surfaces forming a monomolecular protective layer. VCIs protect metals from corrosion due to moisture, salts, acids and other industrial air pollutants.

Parts protected with VCI-120 are ready for immediate use. No cleaning or degreasing of parts is necessary. VCIs do not interfere with further processing of components. The part can be welded, soldered or painted without removing the VCI layer.

VCI-120 is clear, allowing for easy inspection of packaged items. It is also an excellent choice for applications where conventional skin film is being used for metal packaging. VCI-120 can be used with standard skin packaging equipment. VCI-120 will allow protected parts to be stored corrosion-free for many years.

For additional VCI protection, Cortec’s M-5120 can be added to the adhesive/cohesive and used on the corrugated board. M-5120 is a multimetal VCI additive for adhesives.

VCI-120 is covered by two patents:
US # 5,715,945 and 5,937,618.

**DIMENSIONS**
VCI-120 is a custom-made product. It is available in widths up to 33 inches (84 cm) and thicknesses up to 10 mils (250 microns).

**METALS PROTECTED**
- Carbon Steel
- Stainless Steel
- Brass
- Copper
- Aluminum
- Silver

**APPLICATION**
Use VCI-120 for skin packaging (visual carded packaging). The part being packaged becomes the mold over which the heated plastic film or “skin” is drawn by vacuum and heat-sealed to a paperboard card, providing excellent visibility.

**Note**: Depending on application and sealing technique used, the film might need surface treatment.

**STORAGE CONDITIONS**
VCI-120 should be stored in its original packaging. It should not be exposed to temperatures greater than 140°F (60°C). When stored in these conditions, the shelf-life of VCI-120 is two years.
TABLE 1: TOUGHNESS AND CLARITY

<table>
<thead>
<tr>
<th>Polymer</th>
<th>Dart Impact (g)</th>
<th>Puncture Resistance (ft-lb)</th>
<th>Elemendorf Tear (g, MD)</th>
<th>Haze (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI-120 Skin Film</td>
<td>&gt;830</td>
<td>348 (29)</td>
<td>355</td>
<td>1.1</td>
</tr>
<tr>
<td>Surlyn Ionomer</td>
<td>434</td>
<td>104 (8.7)</td>
<td>190</td>
<td>2.9</td>
</tr>
<tr>
<td>Surlyn Ionomer (sodium)</td>
<td>750</td>
<td>140 (11.7)</td>
<td>30</td>
<td>3.2</td>
</tr>
</tbody>
</table>

FIGURE 1: ODOR PERFORMANCE

1. Odor panel evaluated 2-mil (51 micron) blown film for odor intensity.

FIGURE 2: HOT TACK STRENGTH

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

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