VpCI®-143 Paper Emitters, Patented

PRODUCT DESCRIPTION
Cortec VpCI-143 Paper Emitters are a convenient and cost effective solution to corrosion problems. They provide superior corrosion protection for both ferrous and non-ferrous metals. In addition, Cortec VpCI-143 Paper Emitters are fully recyclable/repulpable. They can be recycled into other types of paper products such as boxes, cardboard, and other corrugated materials. VpCI-143 Paper Emitters are environmentally safe, non-toxic, biodegradable; and don’t contain any nitrites, phosphates, silicates, or other hazardous compounds.

Cortec VpCI-143 Paper Emitters are made from the highest quality recycled neutral natural kraft linerboard. They are made without the use of chlorine or other chemical bleaching. This eliminates package contamination.

VpCI-143 Paper Emitters are easy to use. There are no chemical concentrations to calculate, no chemical tanks or application systems to maintain. The VpCI coating on the product vaporizes, reaching all metal surfaces to provide complete corrosion protection. The unique inhibiting action of Cortec VpCI forms a very thin and very effective protective layer that does not alter the appearance of products or require removal before further finishing or use. Parts protected with VpCI-143 Paper Emitters can be painted, welded, and soldered. The protective layer does not influence physical properties of most sensitive electrical components, including conductivity and resistance.

TYPICAL APPLICATIONS
Cortec VpCI-143 Paper Emitters are a very convenient way to protect products for storage and shipment.

The typical applications are:
- Industrial metal products: coils, wire reels, plates, bars
- Metalworking: raw and machined forgings, castings, sheet metal work, springs, bearings, fasteners, tube, pipe, nails, etc.
- Finished products: engines, machinery, equipment, tools, hardware, appliances, instruments, motors, etc.
- Electrical and electronic components, controls, etc.

FEATURES
- Economical to use
- Coated 2-sided for fast vaporization and excellent contact protection
- One product for all ferrous and non-ferrous metals.
- Non-toxic. Contains no nitrates, phosphates, silicates, chromates, or other heavy metals
- Fully recyclable, repulpable
- Effective against aggressive environments
- Formed protective layer does not need to be removed prior to further surface finishing or coating application
- Made with natural grade linerboard, eliminates package contamination.
- Continuous protection

METALS PROTECTED
- Carbon Steel
- Stainless Steel
- Galvanized Steel
- Cast Iron
- Aluminum Alloys
- Copper
- Brass (≤30% Zn)
- Solder
METHOD OF APPLICATION
Products should be packaged as soon after cleaning as possible, but completely dried of residual water. Keep the VpCI-143 Paper Emitters as close to the surface of the product as practical, preferably leaving no barrier between the emitters and the metal surface to be protected.

Use approximately 1 emitter 1” x 1” (6.4 cm²) for every 25 cubic inches (390 cm³) of void space. For long-term storage of up to ten years, enclose the product (with the emitters) in an airtight package.

Standard Construction: Neutral natural kraft linerboard coated with VpCI material.

TYPICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>TAPPI Method</th>
<th>Unit</th>
<th>VpCI-143 Paper Emitters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Weight, lbs</td>
<td>T-410</td>
<td>Lbs/1000ft² (g/m²)</td>
<td>42 (205)</td>
</tr>
<tr>
<td>Caliper (thickness)</td>
<td>T-411</td>
<td>Mils (µm)</td>
<td>10.5 (270)</td>
</tr>
<tr>
<td>Tear-MD</td>
<td>T-411</td>
<td>grams/force</td>
<td>245</td>
</tr>
<tr>
<td>Tear-CD</td>
<td>T-41</td>
<td>grams/force</td>
<td>265</td>
</tr>
<tr>
<td>Smoothness</td>
<td>T-538</td>
<td>sheffield</td>
<td>220</td>
</tr>
<tr>
<td>Smoothness VpCI side</td>
<td>T-538</td>
<td>sheffield</td>
<td>250</td>
</tr>
</tbody>
</table>

CD = Cross Direction
MD = Machine Direction

PACKAGING AND STORAGE
Custom sizes and constructions available upon request, in a 42 lbs./1,000sq. ft. (205 g/m²) linerboard. Other basis weights are also available.

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

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