PRODUCT DESCRIPTION

VpCI®-389 is a water-based, temporary coating which provides excellent protection for outside applications and salt-spray resistance. VpCI®-389 is an environmentally friendly replacement to oil-based products.

VpCI®-389 is an excellent choice for long-term indoor protection (up to 5 years*) and short to medium-term (6-24 months*) unsheltered outdoor protection. This product cures to a soft film and eventually hardens. VpCI®-389 can be easily removed with alkaline cleaners, such as Cortec® VpCI-414.

*Depends on conditions and/or film thickness

FEATURES

• Multimetal protection
• Safe and easy to use
• Environmentally friendly
• Available in ready-to-use form - VpCI®-389 D (1:1)
• Works in SO₂ and H₂S environments

METALS PROTECTED

• Aluminum
• Steels
• Cast iron
• Copper and alloys
• Tin

TYPICAL APPLICATIONS

• Equipment lay-up
• Parts processing protection
• Overseas shipping
• Maintenance repairs
• Parts storage

PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>VpCI®-389</th>
<th>VpCI®-389 D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid, various colors</td>
<td></td>
</tr>
<tr>
<td>Non-Volatile Content</td>
<td>35-40%</td>
<td>17-22%</td>
</tr>
<tr>
<td>Density</td>
<td>7.9-8.4 lb/gal (0.95-1.01 kg/l)</td>
<td>7.8-8.4 lb/gal (0.94-1.01 kg/l)</td>
</tr>
<tr>
<td>pH</td>
<td>8.7-10 (Neat)</td>
<td>8.7-9.8 (Neat)</td>
</tr>
<tr>
<td>VOC (Actual)</td>
<td>.22 lb/gal (25.84 g/l)</td>
<td>0.14 lb (16.5 g/l)</td>
</tr>
<tr>
<td>Dry to Recoat Time</td>
<td>30-90 minutes</td>
<td></td>
</tr>
<tr>
<td>Dry to Tacky Time</td>
<td>10-60 minutes</td>
<td></td>
</tr>
<tr>
<td>Dry to Cure Time</td>
<td>1-3 hours</td>
<td></td>
</tr>
<tr>
<td>Film Type</td>
<td>Soft, tacky</td>
<td></td>
</tr>
<tr>
<td>Shelf Life</td>
<td>12 months at 75°F (24°C)</td>
<td></td>
</tr>
<tr>
<td>Theoretical Spread Rate</td>
<td>187-561 ft²/gal at 1-2 mils (7-14 m²/l at 25-50 microns)</td>
<td></td>
</tr>
</tbody>
</table>

APPLICATION

Surface Preparation:

The surface must be equivalent to ARS. Low A-3 and higher or SSPCs SPs 1, 2, 3, 5, 6, and 10. The recommended film thickness range is 1-2 mils (25-50 microns).

Product Preparation:

Can be diluted with water for sprayability/application purposes; most working ranges are between 1:1 to 1:8 (VpCI®-389:Water).
Product Application:
Mix VpCI®-389 prior to use. VpCI®-389 can be applied by spray, brush, roll, or dip. Normal WFT of 3-6-mils (75-150 microns) yields 1-2-mils (25-50 microns) DFT.

Airless Spray:
- Pressure: 2000 psi (140 bar)
- Filter: 60 mesh
- Tip: 0.015” (0.038 cm)
- Dilution: 0-50%

Conventional:
- Equipment: Binks 18 gun or equivalent
- Automatization pressure: 40 psi (3 bar)
- Fluid pressure: 20 psi (1 bar)
- Cap/Tip: 66/S
- Dilution: 10-50%
- Brush: Nylon/polyester or nylon (dilution 0-50%)
- Roller: Polyester knitted (dilution 0-50%)
- Dip: See Cortec® Application Notes “Dipping” (dilution 2:1 to 1:5)

Product Cleanup:
Use water to clean up tools and overspray.

PACKAGING AND STORAGE
VpCI®-389 and VpCI®-389 D are available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes, and bulk. Do not allow product to freeze.

APPLICATION CONSIDERATIONS
VpCI®-389/VpCI®-389 D should be completely dry before placing the part into storage.

PROTECTION PROPERTIES

<table>
<thead>
<tr>
<th>Test Method</th>
<th>DFT*</th>
<th>SAE 1010 Carbon Steel</th>
<th>Cast Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D 1748 Humidity</td>
<td>1-mil (25 microns)</td>
<td>1000+ hr</td>
<td>-</td>
</tr>
<tr>
<td>ASTM G 85-94 Prohesion</td>
<td>1-mil (25 microns)</td>
<td>600 hr</td>
<td>-</td>
</tr>
<tr>
<td>ASTM B 117 Salt Spray</td>
<td>2-mils (50 microns)</td>
<td>600 hr</td>
<td>40 hr @ 0.5 mil (12 microns)</td>
</tr>
<tr>
<td>DIN 50017 H₂O Atmospheres Condensation</td>
<td>0.5-mil (12 microns)</td>
<td>96 hr</td>
<td>~5% corrosion</td>
</tr>
</tbody>
</table>

*Dry film thickness

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

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