**PRODUCT DESCRIPTION**

VpCI-386 is a unique water-based acrylic primer/topcoat that successfully provides protection in harsh, outdoor, unsheltered applications. The complex mixture of non-toxic organic inhibitors offers protection that can compete with most paints and zinc-rich primers.

VpCI-386 is superior to many coatings with inorganic pigments because the resistance has been improved by replacing pigments and metal oxides with more effective organic corrosion inhibitors. The special combination of additives provides a composite polymer barrier that significantly retards the reaction of metal ionization. A protective film is adsorbed onto metal surfaces. It protects against corrosive electrolytes and aggressive environments; preventing corrosion.

VpCI-386 provides a fast-drying thixotropic coating that is resistant to sagging or running, forming a tough, non-flammable, protective barrier. This dry-to-touch film offers extended protection for outdoor or indoor conditions. Thermally stable when dried from -150°F to 350°F (-78°C to 180°C). The coating is ultraviolet resistant giving optimal outdoor performance without cracking or chipping upon prolonged exposure to sunlight.

**FEATURES**

- Fast-drying, non-flammable
- UV resistant when dried
- Forms non-flammable, protective barrier
- Optimal outdoor performance
- Clear coating allows visual inspection of metal substrate
- Available in standard and custom colors
- NSN 8030-01-481-8897

**METALS PROTECTED**

- Carbon steel
- Cast iron
- Aluminum
- Stainless steel
- Galvanized steel*
- Copper

**APPLICATION**

VpCI-386 can be used as a topcoat/primer. When solvent-based topcoats are applied over VpCI-386, compatibility must be checked. VpCI-386 can also be used as a topcoat with Cortec® VpCI-374 as a primer.

*Use a coat of VpCI-373 green before using VpCI-386 on galvanized.

**Note:** Make sure dew point is more than 5°F (2°C) less than air temperature for application.

Power agitate to a uniform consistency using a “squirrel cage” type mixer, hand-held drill mixer, or other equivalent method.

VpCI-386 can be applied by spray, roll, brush, or dip.
**TEST DATA [at 2 mils (50 microns)] DFT**

<table>
<thead>
<tr>
<th>Test Method</th>
<th>SAE 1010 Carbon Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salt Spray (ASTM B117)</td>
<td>168 hours</td>
<td>1000+ hours</td>
</tr>
<tr>
<td>Humidity (ASTM D1748)</td>
<td>1000+ hours</td>
<td>1000+ hours</td>
</tr>
<tr>
<td>QUV (ASTM G 53)</td>
<td>1000+ hours</td>
<td>1000+ hours</td>
</tr>
</tbody>
</table>

*Dry Film Thickness

**Conventional Spray**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Gun Model</th>
<th>Tip/Aircap Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeVilbiss</td>
<td>MBC or JGA</td>
<td>704E</td>
</tr>
<tr>
<td>Binks</td>
<td>#18 or #62</td>
<td>66PE</td>
</tr>
</tbody>
</table>

Fluid hose should be 3/8" (0.95 cm) I.D. with a maximum length of 50 feet (15.2 m). Pot should always have dual regulation and be kept at same elevation as spray gun.

**Airless**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Gun Model</th>
<th>Tip/Aircap Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graco</td>
<td>205-591</td>
<td>Bulldog</td>
</tr>
<tr>
<td>Binks</td>
<td>Model 500</td>
<td>Mercury 5C</td>
</tr>
<tr>
<td>DeVilbiss</td>
<td>JGN-501</td>
<td>QFA-519</td>
</tr>
</tbody>
</table>

Hose should be 3/8" (0.95 cm) I.D. minimum, but a ¼" (0.64 cm) I.D. whip end section may be used for ease of application. A maximum length of 100 feet (30.5 m) is suggested. Best results will be obtained using a 0.013"-0.017" (0.3-0.4 cm) tip at 1200-1700 psi (83-117 bar).

**Note:** Nylon or Teflon type packings are available from pump manufacturer and are highly recommended.

**Note:** Similar equipment may be suitable.

**PACKAGING AND STORAGE**

VpCI-386 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes, and bulk. Keep product from freezing.

**TYPICAL PROPERTIES**

- **Appearance** Liquid, various colors
- **pH** 8.5-9.7 (Neat)
- **Density** 8.0-10.5 lb/gal (0.96-1.26 kg/l)
- **Non-volatile Content** 32-50%
- **Dry Film Thickness** 1.5-3.0 mils (per coat)
  - (37.5-75 microns)
- **Theoretical Spread Rate** 187-374 ft²/gal
  - (4.6-9.3 m²/l)
- **Dry to Touch Time** 30 minutes @ 77°F (25°C)
- **Fully Cured** 7 days @ 77°F (25°C)
- **55% RH**
- **Temperature Stability** 45°F-90°F (7°C-32°C)
- **VOC (regulatory)** 1.6-1.8 lb/gal (167-216 g/l)
- **VOC (actual)** 0.6-0.8 lb/gal (72-96 g/l)
- **Viscosity** 700-3,000 cps (6 rpm/#2)
- **Temperature Resistance** -150°F to 350°F
  - (-78°C to 180°C)

*varies per color

**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**

---

**LIMITED WARRANTY**

All statements, technical information and recommendations contained herein are based on tests Cortec Corporation believes to be reliable, but the accuracy or completeness thereof is not guaranteed.

Cortec Corporation warrants Cortec® products will be free from defects when shipped to customer. Cortec Corporation’s obligation under this warranty shall be limited to replacement of product that proves to be defective.

To obtain replacement product under this warranty, the customer must notify Cortec Corporation of the claimed defect within six months after shipment of product to customer. All freight charges for replacement products shall be paid by customer.

Cortec Corporation shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products.

BEFORE USING, USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE, AND USER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THERewith. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of Cortec Corporation.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY (INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE). IN NO CASE SHALL CORTEC CORPORATION BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Distributed by:

4119 White Bear Parkway, St. Paul, MN 55110 USA
Phone (651) 429-1100, Fax (651) 429-1122
Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com
Internet http://www.CortecVCI.com

printed on recycled paper 100% post consumer
Revised 2/10/11. Cortec Corporation 1999-2011. All rights reserved. Supersedes: 6/16/09
Cortec® is a trademark of Cortec Corporation © 2011, Cortec Corporation. All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited.
ISO accreditation applies to Cortec’s processes only.