VpCI®-414

PRODUCT DESCRIPTION

VpCI®-414 is a cleaner and degreaser that also removes temporary coatings such as Cosmoline™*, Cortec® VpCI®-368, VpCI®-388, VpCI®-389, and non-silicone-based waxes from metal and painted surfaces.

FEATURES

• Heavy-duty temporary coating remover
• Good for light oils and greases
• Will not affect painted surfaces
• Non-flammable
• Mostly used at room temperature, thus reducing energy consumption. Can also be used in a heated bath for removal of heavy hydrocarbons.
• Viscous liquid that will cling to ceilings and vertical surfaces in a ready-to-use formulation
• Can be used effectively at low concentrations.
• Provides corrosion protection after parts have been cleaned
• Protects metal in solution and above the liquid line on carbon steel

*Cosmoline™ is a registered trademark of Houghton International, Inc.

TYPICAL PROPERTIES

Appearance Clear light yellow liquid
pH 10.9-11.4 (Neat)
Density (SG) 8.6-8.7 lb/gal (1.03-1.05 kg/l)
Non-volatile Content 18-25%

METALS PROTECTED

• Carbon Steel
• Stainless Steel
• Cast Iron
• Galvanized Steel
• Brass (<30% Zn)
• Copper

PACKAGING

VpCI®-414 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

STORAGE

Minimum: 32°F (0°C)
Maximum: 120°F (49°C)

Self Life

Product shelf life is 2 years.

VPCI®-414 DILUTION RATIO CHART

<table>
<thead>
<tr>
<th>Dosage (%)</th>
<th>Light Cleaning</th>
<th>Medium Cleaning</th>
<th>Heavy Cleaning</th>
<th>Coating Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume VpCI®-414 per gallon</td>
<td>Volume VpCI®-414 per liter</td>
<td>Dosage (%)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>6.4 ounces (~3/4 cup)</td>
<td>50ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>12.8 ounces (~1.5 cups)</td>
<td>100ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>25.6 ounces (~3 cups)</td>
<td>200ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>76.8 ounces (~9.5 cups)</td>
<td>600ml</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cleansing Applications

Removing coatings, non-silicone based waxes, greases, and other heavily soiled equipment:

1. Spray apply VpCI®-414

VpCI®-414 can be applied at full strength or diluted. It is best applied by spraying or immersion. The most ideal dilution, where one would get an adequate coverage of wet film for vertical and under-hanging surfaces, is 40% water to 60% concentrate. VpCI®-414 can be sprayed with an airless or pump type sprayer, or used in a dip tank.

Let the product stand (wet) for 10-15 minutes, depending on the film thickness of the product to be removed and the length of time that the coating has cured. Replication may be required.

2. Removal of product and coating

The removal of the product and coating may be accomplished with a power washer at the following settings or even a common garden nozzle.

Pressure: 50-300 psi (3.4-21 bar)
Temperature: 115º-160ºF (46º-71ºC)

If coating removed is tacky or remains tacky in patches repeat step 1.

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.

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VpCI®-414 Calibration Charts

VpCI-414 Brix Reading Correlation

\[
\text{Brix Reading} = 0.25 \times (\text{Weight} \% \ - 0.09) \quad R^2 = 1.00
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VpCI-414 pH Calibration

Please note the solutions used above were created using deionized water. Slight differences in water chemistry (dissolved solids, hardness, etc.) may lead to differences in readings. Please use these numbers as reference only: Contact Cortec® Laboratories with any questions.