**PRODUCT DESCRIPTION**

VpCI®-415 is a MIL-PRF-87937D Type IV Qualified heavy-duty, biodegradable cleaner/degreaser. In addition, VpCI®-415 provides up to six months of corrosion protection for a variety of metals during indoor storage. VpCI®-415 is the perfect choice for the customer requiring a multi-purpose, multi-surface, MIL-SPEC qualified, heavy-duty cleaner; and is also concerned with environmental compliance and worker safety.

**FEATURES**

- Exceptional pitting corrosion resistance
- Excellent cleaning action at low temperatures
- Exhibits hard water tolerance
- Remains stable during freeze/thaw cycles
- Effective with pressure washers, foammers, dipping tanks, steam cleaners, or in mopping applications

**ENVIRONMENTAL ATTRIBUTES**

- Readily biodegradable (according to shake flask biodegradation test method)
- Non-toxic (according to: EPA 600/4-90/027)
- Non-corrosive (according to: MIL-PRF-87937D)
- Will not inhibit pollution abatement systems
- No VOC’s
- No Hazardous Air Pollutants (HAPS)
- No Ozone Depleting Substances (ODS)
- Non-flammable, Non-combustible
- No Carcinogens
- No Ketones
- Contains no nonylphenoolethoxylates

**VpCI®-415 DILUTION RATIO CHART**

<table>
<thead>
<tr>
<th>Dosage (%)</th>
<th>Volume VpCI®-415 (US) per gallon water</th>
<th>Volume VpCI®-415 (Metric) per liter water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Cleaning</td>
<td>6.4 ounces (~3/4 cup)</td>
<td>50ml</td>
</tr>
<tr>
<td>Medium Cleaning</td>
<td>12.8 ounces (~1.5 cups)</td>
<td>100ml</td>
</tr>
<tr>
<td>Heavy Cleaning</td>
<td>25.6 ounces (~3 cups)</td>
<td>200ml</td>
</tr>
</tbody>
</table>

**ENVIRONMENTAL ATTRIBUTES**

- TO 1-1-691
- TO 36-1-191
- TO 1-1-689-3
- TO 1-1-689-5
- TO 35-1-3
- TM 1-1500-344-23
- TO-23’s or equivalent
- Conforms to Boeing D6-17487 Rev P
PROPERTIES

Appearance  Light yellow liquid
pH 8.0-8.7 (Neat)
Density  8.3-8.4 lb/gal (0.99-1.01 kg/l)
Non-volatile Content 14-16%
BOD/COD >0.6

PACKAGING

VpCI®-415 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. VpCI®-415 has a shelf life of 24 months.

For more information or to schedule an on-site demonstration, please contact Cortec’s Military Specialists, or your local Cortec® Representative.

STANDARD TEST METHOD

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIL-PRF-87937, Type IV</td>
<td>Cleaning Compound Aerospace Equipment</td>
</tr>
<tr>
<td>ASTM G-31</td>
<td>Immersion Corrosion Test</td>
</tr>
<tr>
<td>ASTM D4627</td>
<td>Cast iron Chip</td>
</tr>
<tr>
<td>40 CFR 796.3100</td>
<td>Aerobic Aquatic Biodegradation</td>
</tr>
<tr>
<td>Boeing D6-17487 Revision P</td>
<td>Exterior and General Cleaners and Liquid Waxes, Polishes and Cleaning Compounds</td>
</tr>
</tbody>
</table>

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

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.

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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.

Distributed by:

Cortec® Corporation
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
http://www.cortecvci.com

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