







# VpCI®-415, Qualified to MIL-PRF-87937D Type IV AFPET/PTPT 09-004



# PRODUCT DESCRIPTION

VpCl®-415 is a MIL-PRF-87937D Type IV Qualified heavy-duty, biodegradable cleaner/degreaser. In addition, VpCl®-415 provides up to six months of corrosion protection for a variety of metals during indoor storage. VpCl®-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, foamers, 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 nonylphenolethoxylates

# **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

# **VpCI®-415 DILUTION RATIO CHART**

	Volume VpCI®-415 (US) per gallon water	Volume VpCI®-415 (Metric) per liter water	Dosage (%)
Light Cleaning	6.4 ounces (~3/4 cup)	50ml	5
Medium Cleaning	12.8 ounces (~1.5 cups)	100ml	10
Heavy Cleaning	25.6 ounces (~3 cups)	200ml	20



# **PROPERTIES**

Light yellow liquid **Appearance** 8.0-8.7 (Neat) рH

8.3-8.4 lb/gal (0.99-1.01 kg/l) Density

Non-volatile Content 14-16% BOD/COD >0.6

## **PACKAGING**

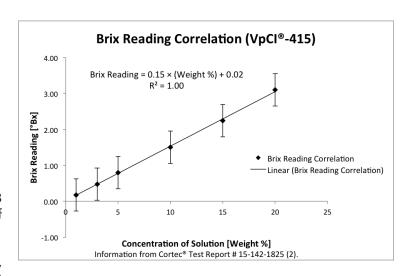
VpCl®-415 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. VpCl®-415 has a shelf life of 24 months.

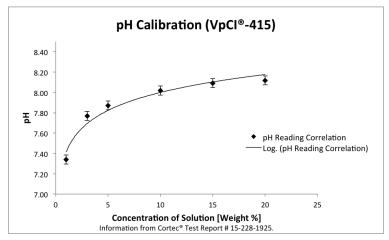
For more information or to schedule an on-site demonstration, please contact Cortec's Military Specialists, or your local Cortec® Representative.

# STANDARD TEST METHOD

MIL-PRF-87937, Type IV	Cleaning Compound Aerospace Equipment	
ASTM G-31	Immersion Corrosion Test	
ASTM D4627	Cast iron Chip	
40 CFR 796.3100	Aerobic Aquatic Biodegradation	
Boeing D6-17487 Revision P	Exterior and General Cleaners and Liquid Waxes, Polishes and Cleaning Compounds	

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** 





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.

### 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

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

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 OF FITNESS FOR A PARTICULAR PURPOSE. IN NO CASE SHALL CORTEC® CORPORATION BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.



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

Printed on recycled paper 100% post consumer



Distributed by: