



# VpCI™ METALWORKING PRODUCTS

# **VpCI-323**

# **PRODUCT DESCRIPTION**

VpCI-323 is a vapor phase corrosion inhibiting oil-based concentrate for use with working engine systems. VpCI-323 provides excellent protection in indoor and outdoor atmosphere conditions.

VpCl-323 protects in two unique ways. First, oil-soluble corrosion inhibitors offer a tenacious film which clings to metal surfaces, giving excellent contact corrosion protection. In addition to this film barrier, Cortec VpCls release vapor phase corrosion inhibitors into the air above the oil. These VpCls attach electrochemically to the metal surface for additional corrosion protection.

#### **FEATURES**

- Metal-free
- Low viscosity
- Universal corrosion protection to ferrous and nonferrous metals
- Does not contain hazardous chromates, nitrites or phosphate inhibitors
- High flash point
- Non-toxic and thermally stable, providing long-lasting contact and vapor phase corrosion inhibitors
- Will pass through a filter mesh size of 1 micron
- Protects metals in a corrosive gas environment (H<sub>2</sub>S)

# **TYPICAL APPLICATIONS**

Working engines:

Add VpCI-323 to oil at a ratio of 1 part VpCI-323 to 10 parts oil for 24 months protection.

Tanks, gearboxes, differentials - stored or shipped dry: Fog cavity interior with VpCI-323 concentrate using 1 liter per 35 ft<sup>3</sup> (1.1 m<sup>3</sup>) of enclosed space.

#### **METHOD OF APPLICATION**

- Fill reservoirs to 10% below full capacity.
- Add VpCI-323 to reservoir at determined dosage (>10% reservoir capacity).
- Cap reservoirs as usual.
- Run vehicle or equipment a minimum of 15 minutes to circulate oil thoroughly throughout system.
- The product should be sealed before storage. The shelf life of VpCI-323 is up to 24 months.

#### **TYPICAL PROPERTIES**

Appearance Clear yellow to amber liquid

Corrosion Resistance Up to 24 months Coverage 1260-1370 ft<sup>2</sup>/gal

 $(31-34 \text{ m}^2/\text{l})$ 

Film Thickness 0.5-1 mil

(12.5-25 microns)

Film Type Oily

Flash Point >212°F (>100°C)

Non-volatile Content 91-97% Odor Petroleum

Removal Method Petroleum solvents

Cortec® alkaline cleaners

Density 7.7-7.9 lb/gal (0.92-0.95 kg/l)

# **METALS PROTECTED**

- Carbon steel
- Stainless steel
- Galvanized steel
- Aluminum
- Brass

- Copper
- Cadmium
- Magnesium
- Silver
- Zinc

### **PACKAGING AND STORAGE**

VpCI-323 concentrate is available in 5 gallon (19 liter) plastic containers, 55 gallon (208 liter) metal drums, totes and bulk. VpCI-323 should be stored sealed. Shelf life is 24 months in sealed drums.



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 notify 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. New pages extending on a recommendation and continued barein shall have any force or effect unless in a writer of continued to the continued barein shall have any force or effect unless in a writer of continued barein shall be used to the continued by the continued barein shall be used to the continued barein shall be used to the continued by the continued barein shall be used to the continued by the cont

representation or recommendation not contained herein shall have any force or effect unless in a written documen 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 OF 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 10% post consumer
Revised 5/31/06. Cortec Corporation 2000-2006. All rights reserved. Supersedes: 2/28/01.
© 2000-2006, Cortec Corporation. All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited.