



VpCI® FORMULATED PRODUCTS FOR PROCESS INDUSTRIES



# VpCI®-644



## PRODUCT DESCRIPTION

VpCI-644 is an additive that protects ferrous and non-ferrous metals from corrosion induced by waters containing inorganic salts, including chlorides. As a concentrated formulation, VpCI-644 offers low dosage effectiveness as a treatment for a wide variety of marine and process applications requiring economical corrosion inhibition for fresh water, salt water, and brine solutions. VpCI-644 contains organic ingredients and has strong film persistency abilities. VpCI-644 is effective as a replacement for formulations containing nitrites, phosphates, chromates or other heavy metals.

## FEATURES

- Prevents corrosion from fresh and salt water, brine, chloride, and other dissolved halogens of ferrous and non-ferrous metals.
- Nitrite/chromate/zinc/phosphate-free.
- Low concentration effectiveness provides economical treatment.
- Residual protection after hydrotest solution is drained out is 1 to 2 months.
- Effective in temperatures up to 200°F (98°C) in liquid and vapor phases.

## TYPICAL APPLICATIONS

Cooling/Heating Systems, Hydrotesting with Seawater: Add VpCI-644 at a concentration level of 0.2-0.3% by weight to brine, containing up to 5% of chlorides and other aggressive inorganic salts. Protection in liquid and vapor phases is greater than 95%.

## TYPICAL PROPERTIES

Appearance	Clear dark brown liquid
Solubility/Water	100%
pH	9.7-10.6 (1% solution)
Density	8.5-8.6 lb/gal (1.02-1.03 kg/l)
Non-volatile Content	27-32%

## PACKAGING AND STORAGE

VpCI-644 is packaged in 5 gallon (19 liter) containers, 55 gallon (208 liter) metal drums, liquid totes, or bulk. Product should be stored in a tightly closed container. Shelf life is 12 months.



**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.

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 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](mailto:info@cortecvci.com)  
Internet <http://www.cortecvci.com>

Distributed by:



**Valdamark Limited**  
Unit 13,  
30 The Downs  
Altrincham, Cheshire, WP14 2PX,  
United Kingdom.  
[valdamark@live.com](mailto:valdamark@live.com)  
Tel: +44 (0) 161 706 0388



printed on recycled paper  100% post consumer  
Revised: 8/13/13. ©Cortec Corporation 1998-2013. All rights reserved. Supersedes: 3/17/11.  
© 2013, 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.