

RoHS
COMPLIANT



CORROSION INHIBITING VpCI® POWDERS

VpCI®-649 Powder

VpCI®-649 PMF



PRODUCT DESCRIPTION

VpCI-649 Powder is a unique powder formulation for protecting different metals against corrosion. It is designed to provide long-term protection in open and closed loop cooling systems.

VpCI-649 Powder combines contact and volatile corrosion inhibitors in a non-toxic, biodegradable formulation that does not contain nitrites, phosphates, chromates, or heavy metals. Being environmentally safe, it helps solve the problem of disposal, particularly for large quantities of water.

VpCI-649 Powder also contains a blend of organic-based scale inhibitors, which prevent scale formation in pipes and towers.

FEATURES

- Effective for a broad range of applications to stop aggressive corrosion from fresh water
- Biodegradable, environmentally friendly, and nitrite-free
- Low concentration effectiveness provides economical treatment
- Vapor phase action provides protection to areas that contact inhibitors cannot reach
- Readily water-soluble
- Multimetal protection of copper, steel, zinc, aluminum, etc.

- Easy application
- Does not contain free amines
- Economical (100% active)
- Easily traceable utilizing a Molybdenum test kit. VpCI-649 Powder contains 1.2% Mo by weight, in the form $\text{Na}_2\text{MoO}_4 \cdot 2\text{H}_2\text{O}$ (at 3.0% of total formulation). See reversed side for Mo vs. VpCI-649 Powder concentration chart
- If powder without molybdate is preferred, VpCI-649 PMF is available

TYPICAL APPLICATIONS

- Unique inhibitor/antiscalant for open and closed loop cooling systems
- Fire extinguishing systems
- Inhibitor for hydrostatic testing of pipelines, casings, tanks, and valves
- Excellent for lay-up of cooling towers

METHOD OF APPLICATION

VpCI-649 Powder should be added starting at (1500-2000 ppm) by weight to the water.

PACKAGING

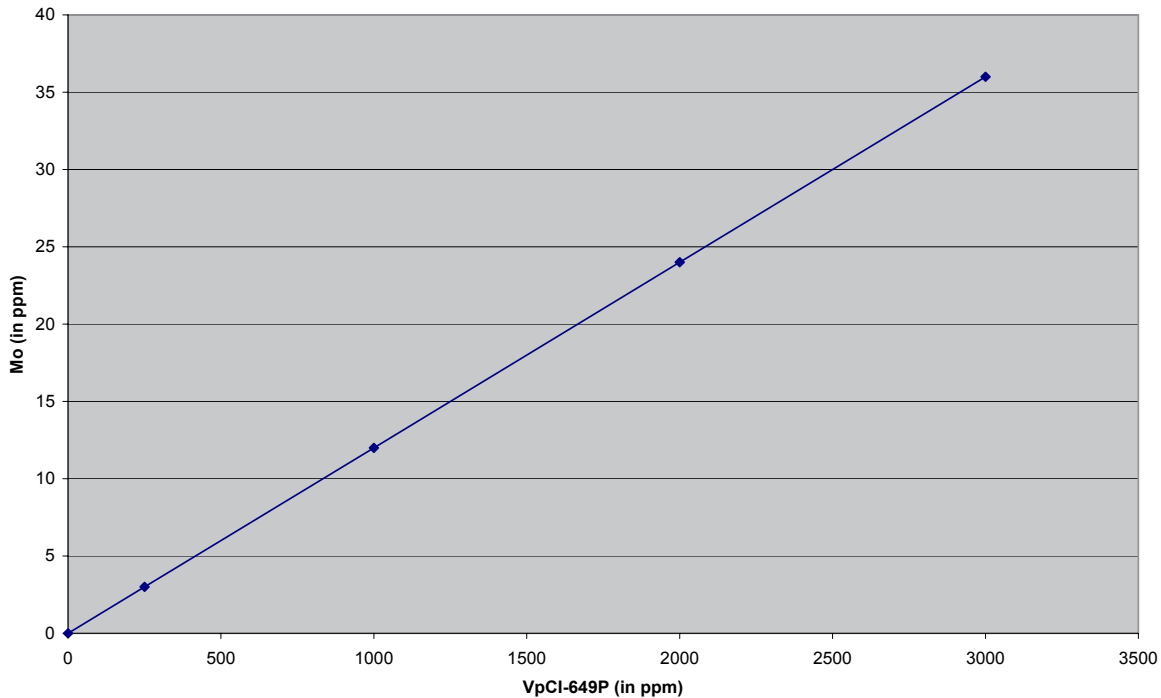
VpCI-649 Powder is available in 5 pound (2.3 kg) water-soluble bags, 50 pound (22 kg), and 100 pound (45 kg) packages. Product should be stored in a tightly closed container. Shelf life is 24 months.

TYPICAL PROPERTIES

Appearance	White powder
Type	Water-soluble
Non-volatile Content	97-100%
pH	11-12.5 (1% solution in water)



Theoretical concentration of Molybdenum vs. VpCI-649P



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 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.



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  100% post consumer
Revised 3/21/12. ©Cortec Corporation 1998-2012 All rights reserved. Supersedes: 8/3/10.
VpCI is a trademark of Cortec Corporation. © 2012, 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.