

Editorial Contact:
Cortec® Advertising Agency:

Shannon Garrow
(651) 429-1100 Ext. 128

sgarrow@cortecvci.com

Company Contact:
Cortec® Corporation

Cliff Cracauer
(651) 429-1100 Ext. 181

ccracauer@cortecvci.com

Technical Contact:
Cortec® Corporation

Casey Heurung
(651) 429-1100 Ext. 147

cheurung@cortecvci.com



Attention: Editor

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PRESS RELEASE



Cortec's CorShield® VpCI®-649: Environmentally Safe Solution For Heating And Cooling Systems!

Cortec's CorShield® VpCI®-649 is a water-soluble, nitrite-free corrosion inhibitor for open and closed looped cooling systems. This unique powder formulation provides long-term protection of copper, steel, zinc, and aluminum. CorShield® VpCI®-649 combines contact and volatile corrosion inhibitors to provide effective protection for a broad range of applications. This product contains a blend of organic-based



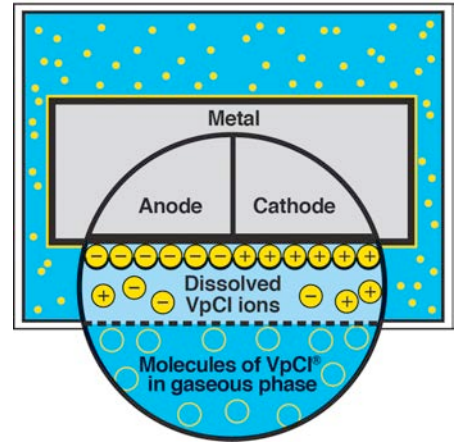
scale inhibitors, which prevents scale formation in pipes and towers. CorShield® VpCI®-649 is an effective, environmentally safe replacement for hazardous nitrite, bromate, or chromate-based formulations. This non-toxic formulation does not contain any heavy metals; and the low concentration effectiveness of the product provides economical treatment. The patented Vapor phase Corrosion Inhibiting (VpCI®) technology enables protection in areas that contact inhibitors cannot reach.

CorShield® VpCI®-649 is easy to apply and highly effective for a broad range of applications such as district heating systems, central cooling and heating systems - like airports and other large gathering facilities, truck diesel engines, off road and agricultural machinery, mining, and pulp and paper process



equipment. It can also be used for preventing water-bottom corrosion in oil storage tanks, fire-extinguishing systems, hydrostatic testing of pipelines, casings, tanks, valves, and many more. CorShield® VpCI®-649 provides excellent corrosion protection for the lay-up of cooling towers. Being environmentally safe, it helps solve the problem of disposal, particularly for large quantities of water.

This product was developed by Cortec® Laboratories to provide multi-metal corrosion protection using Cortec's Technology. The VpCI® technology is an innovative, environmentally safe, cost-effective option for corrosion protection. Cortec® products protect with a thin, monomolecular protective barrier. The barrier re-heals and self-replenishes, and can be combined with other functional properties for added protective capabilities. VpCI® forms a physical bond on the metal surface creating a barrier layer against aggressive ions.



CorShield® VpCI®-649 Powder is available in 5 pound (2.3 kg) water-soluble bags, 50 pound (22 kg), and 100 pound (45 kg) packages.

CorShield® VpCI®-649
Nitrite Free Closed Loop Corrosion Inhibitor

- Easy application
- Dose and contact low cost
- Economical (100% active)
- Ready-to-use solution (100% active)
- VpCI-649 Powder contains 2.2% by weight, in the form of VpCI₂·2H₂O (2.2% in total formulation). See technical data for this vs. VpCI-649 Powder concentration chart.

TYPICAL APPLICATIONS

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

METHOD OF APPLICATION

VpCI-649 Powder should be added starting at 1/100 (0.001) parts 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	White solids
Hydroxide Content	11-12% (1% solution in water)
pH	11-12.5 (1% solution in water)

FEATURES

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

CORTEC
CORROSION TECHNOLOGY

CorShield® VpCI®-649 conforms to NACE Standard RP 0487-2000 and is RoHS compliant.

For more information on CorShield® VpCI®-649, please visit this link:

http://www.cortecvci.com/Publications/PDS/VpCI-649_CorShield.pdf

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Cortec® Corporation is the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies for Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Our relentless dedication to sustainability, quality, service, and support is unmatched in the industry. Headquartered in St. Paul, Minnesota, Cortec® manufactures over 400 products distributed worldwide. ISO 9001, ISO 14001:2004, & ISO 17025 Certified.