



VpCI® ADDITIVES FOR WATER TREATMENT



VpCI®-648



PRODUCT DESCRIPTION

VpCI®-648 is a water treatment additive designed for corrosion protection of ferrous metals and copper at low dosages in deionized or reverse osmosis water. Based solely on organic components, VpCI®-648 does not contain nitrites or any halogen counter ions. At recommended dosages, VpCI®-648 does not significantly contribute to the conductivity of water systems. VpCI®-648 is intended for water-cooled generator stators but is also applicable to other cooling water systems containing copper or steel where low conductivity is required.

FEATURES

- Low conductivity at recommended dosages
- Effective at low concentrations in deionized or reverse osmosis water
- Multi-metal protection
- Does not contain nitrites or halogens
- Low sodium (contributing <2 parts per billion at typical dose)

APPLICATIONS

VpCI®-648 can typically be used for

- Low conductivity applications
- EDM machining
- Plasma arc machining
- Nuclear industry

General Dosing Guidelines:

VpCI®-648 is typically dosed at 20 – 50 ppm in low-conductivity water systems, such as deionized water or reverse osmosis water. Using this product in conductive fresh water requires a higher dosage (500 – 700 ppm).

For long-term protection, additional corrosion protection products should be used. Please contact Cortec® Technical Service for recommendations on your application.

Considerations:

VpCI®-648 does not contain a tracing additive. If a tracer is desired, please consult a Cortec® Technical Service representative. Note that the conductivity may increase by adding a tracing chemical.

METALS PROTECTED

- Ferrous metals
- Copper

TYPICAL PROPERTIES

Appearance:	Viscous yellow liquid
Flash Point:	>203 °F (95 °C)
Density:	9.0 – 9.7 lb/gal (1.08 – 1.16 kg/L)
pH:	9.0 – 10.5 (neat)

CONDUCTIVITY AND PERFORMANCE

VpCI®-648 Dosage (ppm in DI water)	Conductivity (µS/cm)	Corrosion Rate* (Copper)	Corrosion Rate* (Carbon Steel)
0	1.0	0.787 mpy	2.115 mpy
20	5.35	0 mpy	0 mpy
50	13.8	0 mpy	0 mpy

*Immersion testing performed at 140 °F (60 °C) for 168 hours

STORAGE AND PACKAGING

VpCl®-648 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. The product should be sealed during storage. The shelf life of VpCl®-648 is 24 months.

Note: Please see the Safety Data Sheet (SDS) for proper handling of product.

**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**

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