



## VCI ADDITIVES FOR FORMULATORS

# VCI-647

### PRODUCT DESCRIPTION

VCI-647 is a complete corrosion and scale inhibitor liquid concentrate for use in open recirculating cooling water systems. The product is a combination of organic phosphorous compounds, polymers, aromatic azoles, and proprietary components.

The product provides both contact and vapor phase inhibition to protect ferrous and non-ferrous metals. Through solution contact, VCI-647's physically adsorbed inhibiting layer prevents corrosion and pitting of directly contacted metal surfaces. At the same time, its vapor phase action prevents corrosion to parts not accessible by direct solution contact such as head spaces in standby systems. This unique product also incorporates an anti-scalant to maintain heat transfer efficiency.

VCI-647 contains no chromates or other heavy metals. It is environmentally friendly for use without sacrificing operational efficiency or economy. It offers effectiveness similar to the chromate treatment without the problems of fouling encountered in conventional non-chromate systems.

Low dosages provide superior effectiveness over an extremely broad range of waters, assuring economical use and easy control.

### FEATURES

- Contains no chromates, heavy metals, or inorganic phosphates
- Eliminates costs for chromate reduction and sludge disposal
- Excellent corrosion protection and system cleanliness
- Protects ferrous and non-ferrous metals from corrosion and pitting
- Keeps system free from sludge, scale deposits, and bacterial growth
- Provides more efficient heat transfer
- Conserves water through reuse and higher cycles of concentration
- Liquid form for easy, direct application to system without premixing
- Reduces maintenance time and costs
- Simple and easy operator control by using a conventional test kit

### TYPICAL APPLICATIONS

VCI-647 provides complete corrosion and scale protection in an open loop cooling water system.

### DOSAGE

The standard recommendation is 50 ppm.

## TYPICAL PROPERTIES

Appearance	Clear amber liquid
Solubility/Water	100%
pH	10-11 (1% solution)
Density	10.2-10.3 lb/gal (1.22-1.23 kg/l)
Non-volatile Content	45-50%

## PACKAGING AND STORAGE

VCI-647 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 in heated warehouse to prevent freezing. Shelf life is 24 months.

## 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**

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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>

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OTiK Sp. z o.o.

ul. Hutnicza 4  
81-061 Gdynia  
tel.: 58 6230498  
fax: 58 6230496

[otik@use.pl](mailto:otik@use.pl)

[www.inhibitory.use.pl](http://www.inhibitory.use.pl)

