



VpCI®-649 / VpCI®-649 OF / VpCI®-649 Winterized



- Multimetal protection
- Effective in low dosages
- Does not contain free amines

TYPICAL APPLICATION

- Inhibitor for closed loop cooling systems
- Fire extinguishing systems
- Inhibitor for hydrostatic testing of pipelines, casings, tanks, and valves
- Inhibitor for packer fluid applications
- Prevents water-bottom corrosion in oil storage tanks
- Pulp and paper process equipment
- Mines, mining, and earth moving equipment
- Inhibitor for lay-up application of cooling towers

PRODUCT DESCRIPTION

VpCI®-649 is a unique concentrated liquid formulation that protects ferrous and non-ferrous metals from corrosive solutions. In addition, this product is designed to provide long-term protection in fresh water and glycol closed loop systems.

VpCI®-649 is effective as a replacement for nitrite, bromate, and/or chromate-based formulations.

VpCI®-649 combines contact and volatile corrosion inhibitors along with anti-scalants in a non-toxic formulation that does not contain nitrites, phosphates, chromates, or heavy metals. This product helps solve the problem of disposal, particularly for large quantities of water.

VpCI®-649 is also available in a cold weather version, VpCI®-649 Winterized for the convenience of storage in cold temperatures.

FEATURES

- Effective for a broad range of applications to stop aggressive corrosion in systems containing fresh water, glycol coolants, etc.
- Environmentally friendly and nitrite-free
- Low concentration effectiveness provides economical treatment
- Vapor phase action provides protection to areas that contact inhibitors cannot reach
- Contains an acrylic polymer to prevent scale formation
- Readily water-soluble liquid for easy application

VpCI®-649 GENERAL DOSAGING GUIDELINES

Protection Length	Volume VpCI®-649 per 100 gal	Volume VpCI®-649 per 100 L	Dosage (%)	ppm
During Testing & Operational Protection	0.3 gallons (38 ounces)	300 mL	0.3	3000
Up to 6 months	0.5 gallons (64 ounces)	500 mL	0.5	5000
6-12 months	1 gallon	1 L	1	10,000
12-24 months	1.5 gallons	1.5 L	1.5	15,000

*These are general dosing guidelines and may not be suitable for every application. Please contact Cortec® for specific dosage information.

TYPICAL PROPERTIES

VpCI®-649

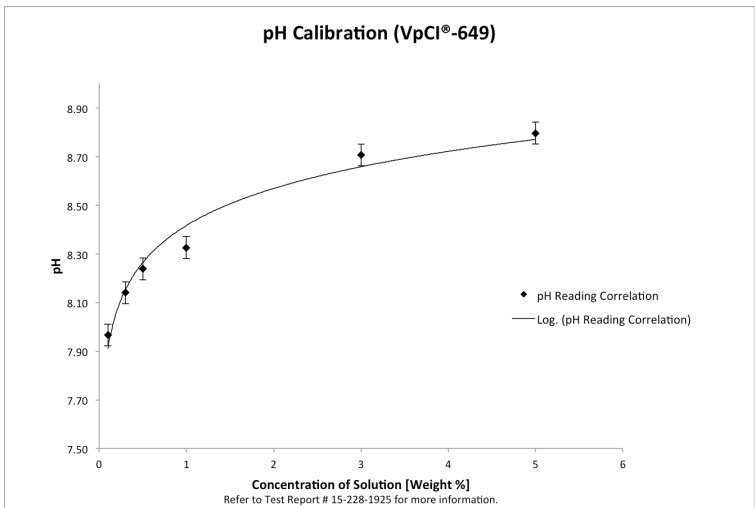
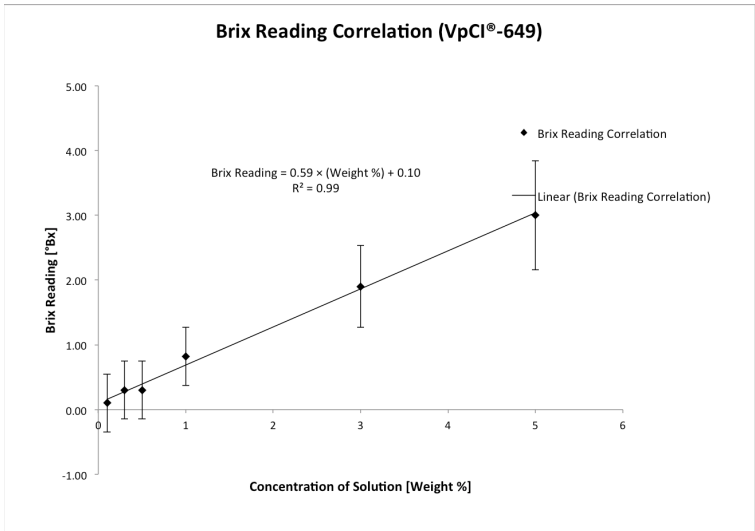
Appearance	Amber Liquid
Density	9.5-9.7 lb/gal (1.14-1.16 kg/l)
Type	Water-based
Non-volatile Content	43-49%
pH	9.1-9.6 (Neat)
Freeze point	7-10°F (-17-12°C)

VpCI®-649 Winterized

Carrier	Water + Propylenen glycol
Freeze point	-36.4°F (-38°C)
Non-Volatile Content	60-64%
Density	9.3-9.7 lb/gal (1.11-1.16 kg/l)
pH	9.1-9.6 (neat)

Acute Toxicity Testing Results for VpCI®-649 Winterized		
Species	Test Time (hours)	LC ₅₀ (ppm)
Fresh Water		
M. beryllina	48	1460
M. bahia	48	1240
Salt Water		
D. pules (water flies)	48	2240
D. promelas (flat headed minnow)	48	2400

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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