

# **VpCI®-645**





#### **PRODUCT DESCRIPTION**

VpCl®-645 is a unique, concentrated formulation that protects ferrous and non-ferrous metals from corrosive solutions containing chlorides. The product is designed to provide corrosion protection in fresh water, salt water, brine, and other highly corrosive solutions containing dissolved halogens.

As a concentrated formulation, VpCI<sup>®</sup>-645 offers low dosage effectiveness as a treatment for a wide variety of marine and process applications requiring economical corrosion inhibition for fresh and salt water.

VpCl<sup>®</sup>-645 is a USDA certified biobased rust preventative. VpCl<sup>®</sup>-645 is effective as a replacement for nitrite- and chromate-based formulations and hydrazine-based oxygen scavengers. Being environmentally safe to use, VpCl<sup>®</sup>-645 helps solve the problem of disposal, particularly for large quantities of water.

#### **FEATURES**

• Provides effective corrosion protection against aggressive attack from high chloride solutions.

- Effective for a broad range of applications to stop aggressive corrosion from fresh and salt water, brine, chloride, and other dissolved halogens.
- Environmentally friendly, nitrite- and amine-free.
- Low concentration effectiveness provides economical treatment.
- Multimetal protection.
- Readily water-soluble liquid for easy application. Solubility is not affected by pH range and salt concentration levels.

## TYPICAL APPLICATIONS

- Closed circuit cooling and heating systems containing brines or water.
- Desalination plants.
- Inhibitor for packer fluid applications.
- Prevents water-bottom corrosion in oil storage tanks and ballast tanks of ship and offshore platforms.
- Wet lay-up of boilers, pipelines, vessels, etc.
- Pulp and paper process equipment.

#### METHOD OF APPLICATION

To provide corrosion inhibiting levels of above 95%, add  $VpCI^{\circledast}$  -645 to:

Cooling/Heating Systems:

• 0.5-0.75% by volume when the concentration level of chlorides is 3% or more by weight.

Hydrostatic testing of pipeline, castings, tanks, and valves:

• 0.75-0.075% by volume, depends on required time of other action protection

#### HYDROTESTING

- 0.5-1% BY Volume in brine
- It is recommended to rinse the vessel after hydrotesting with fresh water containg 0.5% VpCI<sup>®</sup>-609 by weigh



#### **TYPICAL PROPERTIES**

Appearance	Dark brown liquid
Density	10.0-10.5 lb/gal (1.20-1.26 kg/l)
Non-volatile Content	33-40
рН	11-12 (1% in water)

### PACKAGING AND STORAGE

VpCl<sup>®</sup>-645 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. The product should be stored in a tightly closed container. Shelf life is 12 months.

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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