



VpCI® FORMULATED PRODUCTS FOR PROCESS INDUSTRIES

VpCI®-639



PRODUCT DESCRIPTION

VpCI®-639 is designed to provide corrosion protection against the severe conditions encountered in petroleum production and refining. VpCI®-639 is effective for a wide range of refined hydrocarbons, crudes, and oil/water ratios. As a fast acting long-term corrosion inhibitor, VpCI®-639 forms an effective anti-corrosion barrier for metals in the presence of water, halogens, and corrosive gases such as dissolved oxygen, sulfur dioxide, carbon dioxide, and hydrogen sulfide.

Continuous protection between treatments is assured due to VpCI®-639's solubility, dispersibility in natural gas/water mixtures, and long-term water-displacing film formation. In addition, it provides vapor phase inhibition to protect areas inaccessible through direct solution contact. This unique characteristic protects internal parts during low fluid levels and combats atmospheric corrosion in production and storage tanks.

The unique chemistry of VpCI®-639 allows this product to provide excellent protection in sweet/sour (low or high hydrogen sulfide concentrations) environments at a very low concentration. VpCI®-639 is very stable and will perform at elevated temperatures and in high-pressure environments without gunking. Temperature stability is maintained up to 400°F (204°C) and pressures up to 9,000 psi (621 bar) in sweet/sour systems. This product provides corrosion protection through the range of extreme service conditions encountered in natural gas applications.

FEATURES

- Effective for a wide range of refined hydrocarbons, crude, and oil/water mixtures
- Forms an anti-corrosive persistent film barrier to give continuous long-term protection
- Effective against water intrusion, pitting, and corrosive gases
- Vapor phase action provides protection against corrosion from atmospheric conditions for overhead units, production, and storage tanks
- Can be used for a broad range of applications and requirements
- Liquid form for easy direct application without premixing
- Post action inhibiting effect
- Does not negatively affect the water/fuel separation property in the processed fuel products

TYPICAL APPLICATIONS

VpCI®-639 is designed for use in offshore equipment, wells, pipes, pipelines, refineries, tankers, production and storage tanks, and chemical plants.

TYPICAL PROPERTIES

Appearance	Dark brown liquid
Non-volatile Content	35-43%
Solubility (dispersible)	Crude oil, fresh water and brine
Density	7.5-7.8 lb/gal (0.90-0.93 kg/l)
Fuel/Water Separation (MSEP)	61 (ASTM D 3948)
Protection Coefficient	93-99% (NACE TM-01-77)
Post Action Effect	Up to 60 days



Technology of Application			
System	Corrosive Medium	Method of Application	Frequency of Application and Dosage
Pipelines and collection systems for petroleum	Crude oil, emulsions, water, and/or petroleum containing CO ₂ and H ₂ S	Injection of the inhibitor "as is"	Intermittent treatment - Add for 48 hr. period, 4 times a year at 2000 ppm or use continuous treatment at 5-15 ppm
Oil wells and equipment	Crude oil, emulsions, water, and/or petroleum containing CO ₂ and H ₂ S	Injection of the inhibitor "as is"	Periodic injection – Add for 48 hr. at 400-800 ppm every 2-2.5 months

STANDARD TEST METHODS

NACE TM-01-77	Protection Coefficient
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PACKAGING AND STORAGE

VpCI®-639 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. Product should be stored in tightly closed container. Shelf life is 36 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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