



VpCI® METALWORKING PRODUCTS

# VpCI®-322 Oil Concentrate



## FEATURES

- Corrosion protection for ferrous and non-ferrous metals
- Does not contain hazardous barium, chromates, nitrites, or phosphate inhibitors
- Can be used in hydraulic applications
- Provides protection in presence of chlorides
- When added at a concentration level of 5-10% to hydraulic fluids, does not affect pour point and viscosity at low temperatures
- Compatible with most mineral and synthetic oils
- Suitable for both operating and intermittent use conditions

## TYPICAL APPLICATIONS

Lubricating and hydraulic oil systems for intermittent operation: Add VpCI®-322 to oil at a ratio of 1 part VpCI®-322 to 9 parts oil for 24 months protection.

Tanks, gearboxes, differentials - stored or shipped dry: Fog cavity interior with VpCI®-322 concentrate using 1 quart (1 liter) per 35 ft<sup>3</sup> (1.1 m<sup>3</sup>) of enclosed space.

## PRODUCT DESCRIPTION

VpCI®-322 oil-based concentrate adds corrosion protection to lubricating or hydraulic oils. VpCI®-322 provides excellent protection in indoor or open air conditions. First, oil-soluble corrosion inhibitors offer a tenacious film which clings to metal surfaces, giving excellent contact corrosion protection. In addition to this film barrier, VpCI®-322 releases Vapor phase Corrosion Inhibitors (VpCI®) into the air above the oil. These VpCIs attach to metal surfaces for additional corrosion protection.

## METALS PROTECTED

- Carbon Steel
- Copper
- Stainless Steel
- Cadmium
- Galvanized Steel
- Magnesium
- Aluminum
- Silver
- Brass
- Zinc



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Environmentally Safe VpCI®/MCI® Technologies

## TYPICAL PROPERTIES

Oil Characteristics		Typical Values
Appearance		Dark Amber Color
Specific Gravity		0.9
Viscosity (ASTM D92)	40 °C	86 cSt
	100 °C	8.3 cSt
	Index	48
Pour Point (ASTM D6749)		26 °C (-15 °F)
Flash Point (ASTM D92)		186 °C (366 °F)
Fire Point (ASTM D92)		206 °C (402 °F)
Total Acid Number (ASTM D974)	mg KOH/g	26
ISO Particle Count Code		17/15/12
Oil Separability (ASTM D1401) @ 54 °C (129 °F)	Oil, ml	0
	Water, ml	25
	Emulsion, ml	55
	Time, min	60
Foaming Characteristics (ASTM D892)	Seq. I	0/0/0
	Seq. II	60/0/21
	Seq. III	0/0/0

Properties listed above are typical of those obtained through normal production and do not constitute a specification. VpCI®-322 is generally soluble in hydrocarbon based fluids, however compatibility and solubility should be verified prior to use. Please contact Cortec® Technical Service for more information.

## 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**

## PACKAGING AND STORAGE

VpCI®-322 is packaged in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. The product should be sealed before storage. The shelf life of VpCI®-322 is up to 24 months.

## LIMITED WARRANTY

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