



CORTEC
CORPORATION

Environmentally Safe VpCI®/MCI® Technologies

VpCI®-316

DESCRIPTION

VpCI®-316 is a water-based corrosion preventative concentrate designed to replace corrosion inhibiting oils for copper. It leaves behind a very thin, transparent, tack-free protective film that often does not need to be removed from the metal surface before further processing. When diluted with water before application, VpCI®-316 produces a corrosion inhibiting and lubricating film that provides resistance to scratching and mechanical damage of finely machined parts. It also provides sufficient lubrication for stamping and cutting processes. VpCI®-316 offers economical corrosion protection for one to 24 months due to a wide dilution range of 2-30% in water. It does not contain nitrite or phosphate inhibitors.

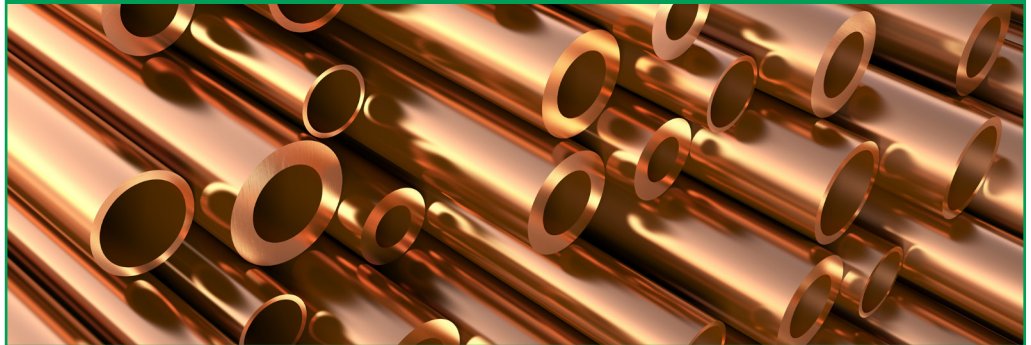
PACKAGING & STORAGE

VpCI®-316 is available in 5 gallon (19 L) plastic containers, 55 gallon (208 L) metal drums.

To ensure best product performance, store in original packaging, indoors, and out of direct sunlight at 40-100 °F (4-38 °C).

Shelf life: 2 years

VpCI® METALWORKING PRODUCTS



FEATURES

- Replaces oils / solvent-based compounds
- Reduces the cost of protection when compared to oil / solvent-based inhibitors
- Eliminates fire hazard associated with oil / solvent-based compounds
- Contains Vapor phase Corrosion Inhibitors (VpCI®)
- Protects metals through a unique vapor phase action
- Prevents scratching and mechanical damage of plated and painted products and sticking of pre-painted coiled steel and sheets
- Environmentally friendly and containing no nitrites, phosphates, nor silicones
- Can be removed with water or any standard cleaning technique, if necessary
- Provides excellent protection for copper and brass
- Also available with UV additive

METALS PROTECTED

- Brass (<30% Zn)
- Copper
- Silver
- Copper-Nickel Alloys

TYPICAL PROPERTIES

Appearance	Clear Yellow Liquid
Flash Point	>200 °F (93 °C)
Non-Volatile Content	24-29%
Odor	Mild
pH	7.5-8.5 (Neat)
Density	8.7-8.9 lb/gal (1.04-1.07 kg/L)

VpCI®-316

TYPICAL APPLICATIONS

RAW METAL PROCESSING/STORAGE/SHIPPING

Use VpCI®-316 in place of slushing oils after pickling and temper rolling or prior to shipping. VpCI®-316 is ideal for protection of coils and sheets for customers requiring “dry” or uncoiled copper or brass.

METALWORKING/MANUFACTURING

Any metal part, component, or assembly between processing steps or in storage/transfer can be protected without the health, fire, or disposal hazards of oils or phosphate coatings. Uses vary from miniature bearings, brass cartridges, or metal furniture to larger earth-moving or agricultural machinery. VpCI®-316 is ideally suited for indoor protection of metals subject to handling and assembly where dry-to-touch film quality, ease of removal, and plant cleanliness are important requirements.

HYDROSTATIC TESTING/MOTHBALLING

(Pumps, vessels, tubing, tanks, boilers)

Use a small percentage of VpCI®-316 to ensure protection during storage/shipping without expensive drying, nitrogen blanketing, desiccants, or heaters.

PACKAGING/SHIPPING

Any covered or packaged product can be protected effectively and economically. The product appearance is improved rather than degraded, and customer acceptance is excellent, since no degreasing is required. Products arrive rust-free and ready-to-use. Service requirements due to corrosion are diminished, resulting in significant savings for the manufacturer.

METHOD OF APPLICATION

Apply by spray, brush, or dip. For high production operations, dip parts into a solution of the inhibitor. Typical coating weight recommended with VpCI®-316 is 20-60 mg/ft² (0.2-0.6 g/m²). VpCI®-316 is designed for protection of metals indoors or in direct exposure to outdoor elements. VpCI®-316 is mixed with water in the following proportions:

Short-term protection (1-6 months):
1 part concentrate to 20 parts water

Medium-term protection (6-12 months):
1 part concentrate to 15 parts water

Long-term protection (up to 24 months):
1 part concentrate to 9 parts water

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LIMITED WARRANTY

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Cortec® Corporation warrants Cortec® products will be free from defects when shipped to customer. Cortec® Corporation's obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement product under this warranty, the customer must notify Cortec® Corporation of the claimed defect within six months after shipment of product to customer. All freight charges for replacement products shall be paid by customer.

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