





# VpCI™ METALWORKING PRODUCTS

# VpCI<sup>™</sup>-377



#### PRODUCT DESCRIPTION

VpCI-377 is a water-based concentrate designed as a complete replacement for oil-based preventives for indoor protection of equipment and components. VpCI-377 is a corrosion preventive liquid that meets tough anti-pollution requirements. The wide dilution range with water (0.5-20%)\* allows flexibility to customize the length of protection required and the applied cost per square foot (or m²).

VpCI-377 forms a solution in water and is applied to metal surfaces by spraying or dipping. VpCI-377 does not need to be removed, but if necessary, can be removed with conventional alkaline cleaners, such as Cortec's VpCI-410 series.

\*Contact Cortec Representative for dilution recomendations.

#### **FEATURES**

- Protects ferrous and non-ferrous metals
- Water-soluble, environmentally friendly and safe to apply
- Prevents flash corrosion on cold-rolled steel
- Very stable in hard water
- Extends shelf-life of finished product

- Will not clog filtration systems
- Forms a clear, dry, hydrophobic film which renders an attractive appearance to protected parts
- Vapor phase action protects uncoated surfaces and difficult to reach areas
- Easy to remove if necessary
- Nitrite- and phosphate ester-free
- Non-flammable
- Dry film is stable up to 350°F (176°C)
- Passes ASTM D-4627-86 (Test Method for Iron Chip Corrosion for Water-soluble Metalworking Fluids) at 2% by weight
- Excellent wetting properties
- Free of hazardous amines
- No hazardous decomposition by-products
- Can be coated over with conventional paint systems

# **TYPICAL APPLICATIONS**

Thin film coating for dry storage of:

- Castings, tubular parts, finished parts, gears
- Pumps and housings
- Textile and printing equipment
- Structural steel, sintered metals
- Bars and roll stock
- Additive to parts washers and rinse water systems
- Hydroblasting and hydrotesting

Spraying or dipping on metal surfaces will provide sheltered or indoor protection.



#### **METALS PROTECTED**

- Carbon steel
- Aluminum
- Stainless steel
- Copper
- Galvanized steel

# **APPLICATION**

Product Preparation:

Add VpCI-377 to water and mix thoroughly. Spray, dip, or use in parts washers and rinse tanks. Solution concentration can be monitored by a refractometer, pH and titration methods.

The pH of VpCI-377 needs to be above 8 in order to be effective.

# **TYPICAL PROPERTIES**

Appearance Clear dark brown liquid

Film Type Dry, clear
Non-volatile Content 40-45%
pH 8.0-9.5 (Neat)
Density 8.8-8.9 lb/gal

BOD/COD (2.5% solution in water, 28 days) 0.48

Corrosion Resistance Up to 24 months indoors

(1.05-1.07 kg/l)

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT MATERIAL SAFETY DATA SHEET FOR MORE
INFORMATION

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STORAGE AND PACKAGING

cans (12 oz. / 340 g) bottles.

months.

VpCI-377 is available in 5 gallon (19 liter) pails, 55

gallon (208 liter) drums, liquid totes and bulk. The

product should be stored sealed in a heated warehouse to avoid freezing. VpCI-377 has a shelf life of 24

VpCI-377 is also available in EcoAir® compressed air

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4119 White Bear Parkway, St. Paul, MN 55110 USA Phone (651) 429-1100, Fax (651) 429-1122 Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com Internet http://www.CortecVCI.com

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