

# VpCI®-308/308 S Powders

## Corrosion Inhibiting Powders for Multi-Metal Protection



### PRODUCT DESCRIPTION

VpCI-308 is a Vapor phase Corrosion Inhibitor (VpCI) in powder form for corrosion protection of ferrous and non-ferrous metals in recessed areas, interior cavities, and voids.

In addition to enhanced multimetal protection and water solubility, VpCI-308 is a biodegradable product.

VpCI-308 is also available as VpCI-308 S (containing silica) with improved flowability.

### FEATURES

- Provides up to 24 months of continuous protection in contact and vapor phases
- Creates monomolecular inhibiting layer
- Vapor phase inhibiting action protects inaccessible and recessed surfaces
- If VpCI layer is disturbed by moisture or opening of the enclosed space, the layer is replenished by continuous vapor redeposition
- Does not contain silicates, phosphates, nitrites, or heavy metals
- Biodegradable
- Little to no surface preparation is required
- Easy to apply
- When required, powder can be removed by blown air or water rinse
- VpCI layer does not interfere with operation of mechanical components
- Provides multimetal protection
- Commercial equivalent to Mil Spec: MIL I-22110C

### APPLICATIONS

- Bottom plate protection of petroleum storage tanks
- Tubular structures, pipes, and vessels
- Internal surfaces of compressors, turbines, engines, tanks, boilers, and heat exchangers
- Dry lay-up of closed circuit cooling systems
- Equipment protection after hydrostatic testing
- Cavities and void spaces on ships, barges, offshore platforms, sewage plants, dams, etc.

### DOSAGE

VpCI-308/308 S protect up to 1 ft<sup>3</sup> (28 liter) of enclosed space per 0.3-0.5 oz. (8.4-14.2 g) of powder (300-500 g/m<sup>3</sup>).

For wet application use 0.5-2% by weight. VpCI-308 is water soluble.

### METHOD OF APPLICATION

Apply powder by dusting, fogging, or sprinkling. After application simply cover, close, or seal the interior cavity or void. VpCI-308 is also water soluble and can be used in wet applications.

Fogging is easily achieved with a low pressure air hose and sandblast cup, or converted wet-dry vacuum. Large conventional sandblasting systems can also be used.

### METHOD OF REMOVAL

When required VpCI-308/308 S in powder form can be removed by using blown air or by a water rinse. Typically, when applied in aqueous form the product does not require removal.

## METALS PROTECTED

- Carbon steel
- Stainless steel
- Copper
- Brass
- Aluminum
- Cast iron
- Silver
- Galvanized steel
- Tinplate

## TYPICAL PROPERTIES

Appearance White to off-white powder  
pH 6.2-6.6 (1% aqueous)

## PACKAGING AND STORAGE

VpCI-308/308 S are available in 5 pound (2.3 kg), 50 pound (23 kg), and 100 pound (45 kg) lined drums. Store in a sealed container in a dry warehouse avoiding direct exposure to sunlight, with temperature not exceeding 150°F (65°C). Shelf life is up to 12 months.

## PRECAUTIONS

• Caking of powder may occur when it is exposed to moisture and then dried. The likelihood of this is increased when powder is exposed to high heat and multiple wet/dry cycles. When powder gets caked, baked, and hardened it may require removal by mechanical means or by aggressive acid cleaning. To avoid caking of powder do not over apply or unevenly disperse the dry powder. In aqueous applications make sure the powder has been totally dissolved before using.

• Powder is not soluble in hydrocarbon fluids. Rinse powder from vessels before adding hydrocarbon fluids.

• Powder should be removed from the area prior to high temperature processing or welding.

## Toxicological Testing Results

| Test Species | NOEC/LOEC, ppm | 48-hr LC50*, ppm |
|--------------|----------------|------------------|
| D. pulex     | 100/1000       | 200              |
| P. promelas  | 100/1000       | 316              |

## 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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