





VpCI®-422





PRODUCT DESCRIPTION

VpCl®-422 effectively removes rust and tarnish from steel, iron, copper, and brass. VpCl®-422 removes corrosion from metal without creating waste disposal difficulties and is more operator friendly than traditional rust removers.

VpCl®-422 G is a modification of VpCl®-422, which is recommended for galvanized steel.

It will not adversely affect most paints, plastics, wood, textiles, ceramics, or rubber when used as recommended. Removing corrosion from metal is easy; just apply VpCl®-422 and rinse with water.

VpCl®-422 is completely organic and does not require special disposal for typical use. It is especially helpful for outdoor and marine applications where chemical waste disposal can be a problem. In rare situations, waste treatment may be required if large quantities of pollutants are accumulated during cleaning.

Unlike conventional rust removers, which can be extremely dangerous to use, handle, and store; VpCl®-422 is non-flammable and biodegradable. It can be used in labor-intensive areas such as continuous assembly and packaging lines minimizing effects on production efficiency.

FEATURES

- Removes rust and corrosion from ferrous and non-ferrous metals.
- Prevents flash rusting
- Completely organic and readily biodegradable
- Non-polluting and environmentally acceptable (Check with local authorities for specific disposal guidelines)
- Loosens rust-frozen parts
- No adverse effects on most paints, plastics, wood, textiles, ceramics, and rubbers
- Non-flammable formulation and mild odor, ideal for in-plant use
- NSF (A3) Registered. Acceptable for use as an acid cleaner in and around food processing areas for indirect food contact
- Passes ASTM F-519-05 "Mechanical Hydrogen Embrittlement Evaluation of Plating/Coating Processes and Service Environments"

TYPICAL APPLICATIONS

- In-process rust removal for parts and metal stock
- Interior and exterior surfaces of tanks and vessels
- Outdoor machinery and equipment
- Trucks, cars, and other vehicles
- Automotive, marine, and equipment
- Fences, railings, and walls
- Tools, locks, and rust-frozen parts

APPLICATION

VpCI®-422 can be applied using spray equipment including air and airless spray as well as by brush or dip.

For spray, brush, or roll-on application; remove loose rust or tarnish. Then apply VpCl®-422 concentrate to surface, let chemical stand for 10 to 15 minutes, and rinse with an alkaline solution (Cortec® VpCl®-41x Series). Typically, little or no rubbing is required. Reapply if necessary.

Let VpCl®-422 stand for longer time for medium and heavy rust. Soak part(s) in a tank as long as required to remove corrosion. Remove part(s) from tank and rinse with an alkaline solution (Cortec® VpCl®-41x Series). Increasing temperature up to 150°F (65°C), and/or agitation will speed the cleaning process.

Please contact Cortec® Technical Services with product questions.

TYPICAL PROPERTIES

VpCI®-422

Appearance Dark amber to brown liquid

Non-volatile Content 27-33% Odor Light

1.7-2.5 (neat) рΗ

Weight per Gallon 9.3-9.6 lb/gal (1.11-1.15 kg/l)

VpCI®-422 G

Dark brown liquid **Appearance**

Non-volatile Content 27-35% Odor Light 6-8 (neat) рΗ

Weight per Gallon 9.4-9.7 lb/gal (1.13-1.16 kg/l)

STANDARD TEST METHODS

Test Methods	Results	Description
ASTM F-519	No embrittlement	Mechanical Hydrogen Em- brittlement Evaluation of Plating/ Coating Processes and Service Environments
ASTM D-6866-11	92%	Determination of Biobased Content
OECD Method 301D	BOD/COD = 0.67 Easily Biodegradable	Biodegradability

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**

TESTING RESULTS

Toxicological Testing Results* Marine Toxicity

Test Species	Results (LC-50)** ppm. 48 hours
Sheepshead Minnow (Cyprinodon Variegatus)	707
Americamysis bahia	107
Sceletonema castatum	72 (EC-50)**
M. beryllina	528
M. Bahia	109

*Testing performed in compliance with OECD (Organization for Economic Cooperation and Development) Principles of Good Laboratory practices.

PACKAGING AND STORAGE

VpCI®-422 and VpCI®-422G are available in 5 gallon (19 liter), 55 gallon (208 liter) drums, totes, and bulk. Store product in a heated warehouse to avoid freezing.

Minimum storage temperature: 40°F (4°C) Maximum storage temperature: 120°F (49°C)

LIMITED WARRANTY

All statements, technical information and recommendations contained herein are based on tests Cortec® Corporation believes to be reliable, but the accuracy or completeness thereof is not guaranteed

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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^{**}LC-50/EC-50 --- 50% of Lethal Concentration/50% of Effective Concentration respectively.