SURFACE PREPARATION PRODUCTS

REMOVE RUST

CLEAN SURFACES

PRESERVE THE ENVIRONMENT

CORTEC CORPORATION
Environmentally Safe VpCl™/MC1™ Technology
Cortec’s rust removers, metal conditioners and paint strippers are biodegradable and non-polluting when compared to other industrial products — eliminating and/or reducing virtually all waste disposal problems.

Corrosion is a persistent problem that must be carefully handled in a step-by-step process. Cortec’s environmentally friendly products make it easy to clean metal, remove rust, condition and prepare metal for temporary or permanent coatings and packaging. Cortec Surface Preparation products also add Cortec® VpCI® corrosion protection.

**STEP ONE**
REMOVE OILS, GREASES AND SOILS

Many metals become extremely contaminated with heavy rust, scale and hydrocarbon deposits. These contaminants MUST be removed before further processing will be effective.

**Cortec VpCI-411 & VpCI-411 Gel**
**Cleaner Concentrate**
Cortec’s VpCI-411 concentrated cleaner is biodegradable, organic and made from natural solvents. This heavy-duty, versatile cleaner can be used in a variety of household, commercial and industrial applications i.e., adhesives and greases. VpCI-411 is effective on a broad range of metal surfaces, especially those susceptible to deterioration in an alkaline environment. This product not only inhibits corrosion of freshly cleaned surfaces, it is safe to the touch and has a fresh lemon scent.

**STEP TWO**
REMOVE OLD PAINT

**Cortec VpCI-414**
**Cleaner Concentrate**
Cortec’s VpCI-414 is a non-toxic, biodegradable, water soluble cleaner concentrate. This heavy-duty temporary coating and wax remover is extremely effective in the removal of dirt, oils and greases or other cosmine-like products. As a viscous liquid, VpCI-414 is ideal for under-hanging and vertical applications. After rinsing with water, VpCI-414 will provide multimetal corrosion protection for 24 to 48 hours.

**Cortec VpCI-415/416/417/418/419**
**Cleaner/Degreasers**
Cortec’s VpCI-415/416/417/418/419 products are heavy-duty cleaners/degreasers which provide the first step needed in preventing rust and corrosion. Unlike many industrial cleaners, VpCI-415/416/417/418/419 are non-toxic, non-corrosive, non-flammable cleaners that also provide multimetal protection. VpCI-415 offers unique flash corrosion protection and is formulated to meet the requirements for cleaning and corrosion protection of aircraft. VpCI-415 conforms to MIL-PRF-87937C. VpCI-416 is a liquid, water-based, environmentally friendly and nitrite-free product. The low foaming VpCI-417 and 418 powders are excellent for power washing equipment and agitation tanks. VpCI-419 is a liquid chemical concentrate that is ideal for low foaming floor cleaning applications.

**Cortec VpCI-432/433**
**Paint Strippers & Cleaners**
Cortec’s VpCI-432/433 Paint Strippers and Cleaners are environmentally safe for removing paint from metal, wood and concrete, as well as providing protection against corrosion, flash rusting and discoloring of stainless steel, iron, copper, aluminum and brass. The heavy-duty formulation, which removes paint in three to thirty minutes, also effectively removes graffiti from concrete. These paint strippers, developed with maximum user safety in mind, do not contain many of the chemicals — such as methylene chloride, chlorinated solvents, methanol, toluene and acetone — found in other competing products.

Cortec’s VpCI® 432/433 Paint Strippers are formulated to remove urethanes and difficult-to-remove epoxies. They can handle the toughest coatings, yet are very safe compared to heavy-duty paint strippers.
TOTAL CORROSION CONTROL™

Cortec® Corporation is dedicated to controlling corrosion at ALL STAGES of a product life cycle. Cortec has developed a diverse range of corrosion protection products including cleaners, metalworking fluids, waterborne, high performance coatings, corrosion inhibitors, rust removers, paint strippers, powders, packaging foams, papers, films, surface treatments and concrete admixtures. Contact Cortec for additional brochures and information.
## PRODUCT DESCRIPTION APPLICATIONS

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- **VpCI-411 (liquid)**, **VpCI-411 (gel)**: D-limonene based universal cleaner. Removes dirt, oil, grease, and more. Non-hazardous and biodegradable. Safe on all metals. Application Temp: Room temperature to 300° F (149° C). Dilution Ranges are with water: Full strength to 10%.

- **VpCI-414**: Viscous liquid that removes temporary coatings on steel, aluminum, and painted surfaces; biodegradable; clings to ceilings and vertical surfaces. Application Temp: Room temperature to 120° F (49° C). Dilution Ranges are with water: 30% to remove coatings including VpCI-366, VpCI-388, VpCI-389; 20% for tumblers, dip tanks, ultrasonic tanks and screw machines; 5% for machine tools, benches, floors, saw blades machinery, autos, trucks, snowmobiles, grills, railroad equipment, service bays, pit areas and construction equipment. 5 gal. (19 liters) pails, 55 gal. (208 liters) drums, 275 gal. (1041 liters) totes and EcoAir™ aerosol cans.

- **VpCI-415**: Heavy-duty biodegradable water-based alkaline cleaner and degreaser offering unique flash corrosion protection. Conforms to MIL-PQ-87937C and meets the requirements for cleaning and corrosion protection of aircraft. Application Temp: 50°-300° F (10°-149° C). Dilution Ranges are with water: 1 part VpCI-415 to 4 parts water for heavy-duty cleaning and corrosion protection; 1 part VpCI-415 to 10 parts water for normal cleaning (i.e. parts washing); 1 part VpCI-415 to 20 parts water for light cleaning (i.e. rinsing). Application: Apply with any conventional equipment including: sprayers, dipping tanks, steam cleaners and power washers.

- **VpCI-416**: Non-toxic, heavy-duty, water-based liquid degreaser providing temporary corrosion protection for brass, copper, steel, and aluminum. Application Temp: Room temperatures to 170° F (77° C). Dilution Ranges are with water: 20% for removal of heavy grease and oil before tank cleaning; 10% for removal of oil, grease, dirt or metalworking fluids from tumblers, dip tanks, ultrasonic tanks, and screw machines; 5% for cleaning of machine tools, benches, floors, saw blade machinery, railroad equipment, service bays, pit areas and construction equipment. 5 gal. (19 liters) pails, 55 gal. (208 liters) drums, 275 gal. (1041 liters) totes and 16 oz. (47 liter) EcoSpray® bottles (416).

- **VpCI-417**, **VpCI-418**: Designed for use in high agitaton, high pressure parts washers. Application Temp: Room temperature to 170° F (77° C). Dilution Ranges are with water: 1-2% cleans multimetal parts of oil, dirt and grime; 3.5% cleaning and flash corrosion protection of cast iron; 7% for cleaning and flash corrosion of magnesium. 5 pound (2.27 kg) box, 50 pound (22.7 kg) drums, 100 pound (45.4 kg) drums.

- **VpCI-422 (liquid)**, **VpCI-423 (gel)**: Biodegradable rust remover and cleaner for multimeals including steel, copper chrome metals and alloys. Application Temp: Room temperature to 130° F (54° C). Dilution Ranges are with water: Full strength to 25%. Removes corrosion and contamination from all engineering metals. Use the liquid in dip tanks to remove corrosion and the gel for hard-to-reach or vertical surfaces. Room temperature to 130° F (54° C). Dilution Ranges are with water: 4-10 ounces per gallon of water (30 - 70 grams/liter). Removes light rust, oxidation and scale. 5 pound (2.27 kg) box - powder; 50 pound (22.7 kg) box - powder; 100 pound (45.4 kg) box - powder.

- **VpCI-425**: Neutral, biodegradable rust and scale powder remover for metals including aluminum, copper and brass. Application Temp: Room temperature to 150° F (66° C). Dilution Ranges are with water: 4-10 ounces per gallon of water (30 - 70 grams/liter). Removes light rust, oxidation and scale. 5 pound (2.27 kg) box - powder; 50 pound (22.7 kg) box - powder; 100 pound (45.4 kg) box - powder.

- **VpCI-426 (liquid)**, **VpCI-426 (gel)**: Scale and rust remover for ferrous and non-ferrous metals, including carbon steel and cast iron; also brightens aluminum and magnesium. Application Temp: Room temperature to 170° F (77° C). Use the liquid in dip tanks to remove corrosion and the gel for hard-to-reach or vertical surfaces. 5 gal. (19 liters) pails, 55 gal. (208 liters) drums, 275 gal. (1041 liters) totes.

- **VpCI-427 (liquid)**, **VpCI-428 (gel)**: Heavy-duty aluminum cleaner and surface conditioner. Application Temp: Room temperature to 120° F (49° C). Dilution Ranges are with water: 15-50%, depending on extent of corrosion. Use the liquid in dip tanks to remove corrosion and the gel for hard-to-reach or vertical surfaces. 5 gal. (19 liters) pails, 55 gal. (208 liters) drums, 275 gal. (1041 liters) totes.

- **VpCI-429 (liquid)**, **VpCI-433 (gel)**: Methylene chloride-free paint stripper that prevents corrosion, flash rusting and discoloration. Effective on paints, lacquers, enamels, waxes, alkyds, latex acrylics, urethanes and epoxies. Application Temp: Room temperature up to 150° F (66° C) for hot striping. Dilution Ranges are with water: Use full strength for cold or hot paint stripping or ultrasonic baths. Use the liquid in dip tanks to remove corrosion and the gel for hard-to-reach or vertical surfaces. 5 gal. (19 liters) pails, 55 gal. (208 liters) drums, 275 gal. (1041 liters) totes. ecoAir™ aerosol cans.

- **Corwipes® 300**: Multipurpose wipe to clean and protect ferrous metals. 100 wipes/carton, 72 wipes/canister.

- **VpCI® CorrVerter™**: Non-toxic, water-based primer recommended for application to rusty or poorly prepared steel surfaces. Dilution Ranges are with water: Full strength to 10%. Applications: For industrial maintenance, light-duty maintenance, general metal coatings, and marine and industrial coatings. Brush, roll or spray at 3-5 mils (75-125 microns) wet film thickness. Brush application is preferred to ensure penetration into the rust. For badly corroded surfaces a second coat should be applied within 20-30 minutes to ensure maximum protection. 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

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**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 product shall be paid by customer. Cortec Corporation shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products.

**CORPTEC CORPORATION**

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See Cortec® EcoSpray®/EcoClean® and EcoAir™ product information for similar products.