# ASSET PRESERVATION SYSTEM FOR THE MILITARY













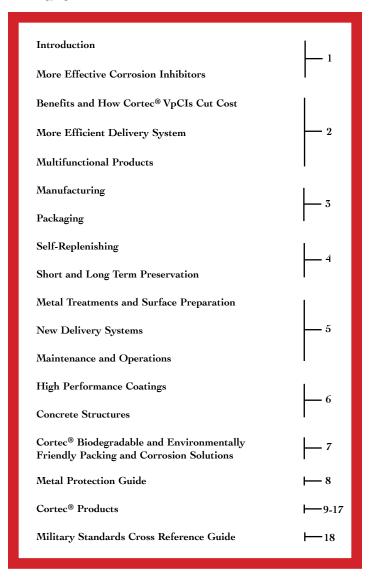
#### Introduction

Many types of corrosion prevention measures have been adopted over the years by the military. Now, new strategies are continually being developed and evaluated for effective corrosion control. Loss due to corrosion has become a major priority for militaries.

Some Militaries choose to do Nothing!

War Readiness is a Key Factor now being taken into consideration, and Cortec® has the solutions needed that fit easily into existing application systems that will reduce costs of protection with more efficient and economical solutions. Cortec® can extend asset life and enhance war readiness.

#### Index



# More Effective Corrosion Inhibitors

#### Health, safety and pollution control.

Cortec's formulations, using the newest chemical technology available, help alleviate your concerns in the areas of health, safety, flammability and pollution control.

#### Multimetal protection.

A full range of corrosion inhibitors is available to protect ferrous and non-ferrous metals, including formulations that protect combinations of metals to prevent galvanic corrosion.

#### Short- and long-term protection.

There's a Cortec® solution whether you need temporary protection during maintenance and operations, medium-term protection for shipment and storage or extended protection for lay-up, mothballing and field service for anything from weaponry to ground equipment, vehicles to avionics.

#### For a variety of environmental conditions.

Now you can effectively protect your metals and products against humidity and aggressive atmospheres such as corrosive industrial, marine, and tropical atmospheres.

#### Protected parts are immediately ready for use.

The protective invisible molecular layer deposited by Cortec® Vapor phase Corrosion Inhibitors (VpCI®) needs no removal. No degreasing, scraping, cleaning, or further preparation is necessary before processing, installation, or use. Your VpCI® protected components, parts, and finished assemblies are always ready for immediate use. Cortec® barrier coatings are easily removed with conventional cleaning methods.

#### Does not alter most material properties.

In the majority of cases, the invisible protective ionic layer of Cortec® VpCI® does not alter important surface properties. This is true even for most precision electronic devices where conductivity, permittivity, and dimensional tolerances are crucial.

#### For tiny electronic devices to tanker holds.

Cortec® VpCIs protect any size product — from printed circuit board components in processing, parts stored in a small box, large containerized shipments, to vehicles and equipment.

# Benefits and How Cortec® VpCI® Cut Cost

- Multifunctional products.
- Environmentally friendly.
- More effective protection that checks, decreases and prevents atmospheric corrosion.
- Efficient delivery systems that make it economical to treat hardto-protect items.
- Easy application.
- Improved health and safety.
- Elimination of extra processing steps
- No need to remove VpCI® protection, metals are ready for immediate use.
- Extension of equipment life.
- Economical.
- Immediate war readiness.

Use Cortec® systems in every stage of a product's life, starting from the production of metal stock to actual use in the field. When properly applied, Cortec® VpCIs substantially cut time and costs throughout the entire product life cycle: in manufacturing, temporary and deep storage, shipment and field service.

Cortec® VpCIs eliminate many extra processing steps such as cleaning, degreasing, rust removal, pickling, sandblasting and reprotecting. You have less re-work, fewer rejects, improved quality, reduced rust claims and extended equipment life.



## More Efficient Delivery System

Add • Dip • Inject • Package • Attach • Disperse • Insert • Roll-on • Migrate • Wrap • Brush • Fog • Clean • Cushion • ESD • Automatic dispense • Electrostatic spray • Coat

These delivery systems offer practical, economical break-throughs for the protection of metal parts and products. Cortec's® innovative use of VpCI®/MCI® technology makes these treatment methods possible.

Cortec® VpCIs are uniquely formulated for many types of delivery systems. Whether liquid, powder, impregnated foam, or plastic, Cortec's formulations use technology to its best advantage for effective and economical corrosion protection.

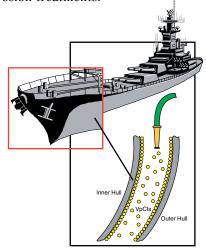
The creative use of Cortec's corrosion protection technology offers improved protection even for conventional applications (brush, rubber blade, dip or spray).

#### **Multifunctional Products**

From packaged products stored indoors to products located outdoors in adverse conditions, new generation VpCI® systems make it more profitable to solve a corrosion problem than to ignore it. For example, you can:

- 1. Fog a void space in a few minutes and eliminate corrosion problems for long term protection.
- 2. Protect on-site, operational electrical circuitry for pennies a day.
- Easily spray valve flanges and stems with an outdoor coating for extended protection.
- Boost the protection of your lubricating oils and fluids with an additive effective for multimetal systems.

These four examples just begin to show how Cortec® VpCI® successfully solve the problem caused by impractical conventional corrosion treatments.



# Manufacturing

During the manufacturing of your product, whether circuit boards or metal stampings, Cortec® products easily integrate into fabrication and assembly processes. While eliminating the corrosion of ferrous and non-ferrous metals, Cortec® products provide lubrication, enhancing production speeds and tool life to help produce and maintain first-quality asset preservation.

Cortec® corrosion inhibitors provide you with unique solutions to difficult corrosion problems. Use VpCI® powders to protect difficult-to-reach voids. Waterbased inhibitors replace oily coatings and coolants, and provide easy-to-remove intermediate protection. Water soluble additives in hydrotest and hydroblasting solutions protect during and after use. VpCI® emitters protect electronic and electrical assemblies during the various stages of fabrication, assembly, shipping and field operation.

Throughout the life of your tank, valve, compressor, circuit board, electrical box, printing press, or whatever your product may be, Cortec® protects your assets from beginning to end.



age and shipping, and sheet liners for product separation. These paper products are nitrite free.

Films: Cortec® VpCI® films provide protection in a variety of forms to suit your packaging needs. Films range from general use polyethylene to shrink wrap, stretchable and reinforced constructions. All films have excellent clarity.

The multifunctional VpCI®-125 films and bags incorporate Vapor phase Corrosion Inhibitors, desiccant and antistatic construction.



VpCI-126® bags and films employ moisture absorbing action and are available in high performance constructions.

VpCI®-129 is a barrier protection which maintains a vacuum and is excellent for high temperatures and humidity.

The MilCorr® shrink film was especially developed for military use featuring high UV absorption and flame retardancy with Cortec's superior corrosion protection.

Foams: Cortec® impregnated foams and Cor-Pak® bubbles protect precision machined parts and highly sensitive electronic components. They protect items from breakage and surface damage – like scratches. Cortec® EcoShield® protects delicate items with its abrasive-proof lining and absorbs condensation.

Inserts: Cortec® VpCI® inserts provide exceptional absorption and even reach recessed areas. Inserts fit into virtually any packaging system and come in pouches, tablets, foam circles and squares.

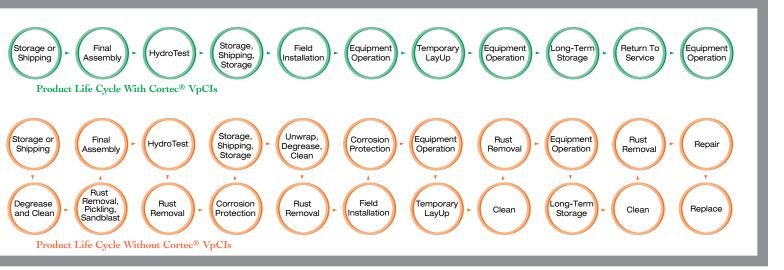
# **Packaging**

Cortec® offers a full line of standard and custom packaging products in conformance with various military, ASTM, DIN, JIS, BS, and other international standards. Cortec® packaging products include papers, films, foams, cushioning bubbles, and inserts. All of the packaging products provide multimetal corrosion protection.

Papers: Cortec® VpCI® papers provide corrosion protection in several different applications including single item packaging, multiple item wrapping for bulk shipments, weaponry, ammunitions, OEM and automotive parts packaging for stor-



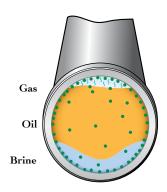
# from raw materials to final user.



# **Self-Replenishing**

Unlike conventional corrosion inhibition methods, Cortec® VpCIs are self-replenishing. Add Cortec® VpCIs into any part of your system at single or multiple points. For example, inject VpCIs automatically into a system — without any operator attendance — and immediately start protecting hundreds of feet of piping in steam lines, liquid distribution systems or hundreds of kilometers of pipeline.

As a pro-environmental corrosion treatment of the 21st century, Cortec® VpCIs are free of chromates, other heavy metals, phosphates or chlorinated hydrocarbons. These new organic formulations give you an environmentally acceptable way to protect equipment. From aggressive brine solutions in wells, to protecting miles of remote pipeline, Cortec® VpCIs extend the life of equipment and provide protection in the interface, liquid phase and vapor phase.



Pipeline section showing active VpCI® protection in the interface, liquid phase, and vapor phase.

# Short and Long Term Preservation

When using Cortec® solutions you can rely on the same corrosion protection to lengthen the service life of your product. Cortec® VpCI® systems protect electrical and electronic equipment during operation and shutdown. Cortec® water or oil-based barrier coatings protect installed valves and pumps from atmospheric corrosion. Cortec® additives protect lubricant systems from corrosive environments and contaminants.

In cases where equipment or systems require lay-up for temporary shutdown or long-term mothballing, Cortec® products offer many benefits. You can apply them easly, quickly, and usually without surface preparation to your piping, tubes, tanks, motors, generators, etc... External as well as internal working surfaces and mechanical parts are effectively protected. You select the degree of protection needed based on the severity of the environment and the length of exposure. Your protected equipment will always be ready for use.

Costs may be decreased 40-60% according to well documented data for deep storage and preservation of military vehicles and equipment. Since removal or draining of VpCIs is not necessary, immediate war readiness can now be realized. Savings of millions of dollars in hazardous waste generation is also a part of this data.



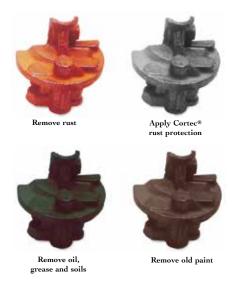
# Metal Treatments and Surface Preparation

Cortec® Metal Treatments and Surface Preparations come in liquid and gel form for dip, spray and brush-on applications. Cortec's pro-environmental products for metal treatments also include biodegradable cleaners and non-polluting paint stripper.

Cortec® Rust Removers are based on organic chemicals that remove oxide and tarnish from iron, copper, brass and aluminum. These formulations replace harsh acids. When used as recommended, the rust removers are non-polluting as well as mild to human skin, most paints, plastics, woods, textiles, ceramics and rubber.

Made from water-based, natural ingredients whenever practical, most Cortec® cleaners and degreasers are biodegradable, non-toxic and non-flammable. They are specially formulated for safety and multi-purpose, multimetal use. They also include corrosion inhibitors to prevent flash rust of freshly cleaned surfaces.

Cortec® paint stripper was also developed with consumer safety in mind. It is free of methylene chloride, chlorinated solvents, methanol, toluene or acetone, yet removes paint in three to 30 minutes.



# **New Delivery Systems**

The Cortec® Corrwipe® is a revolutionary multipurpose wipe that cleans and leaves behind corrosion inhibitor protection. This wipe is environmentally safe and can be used without gloves. Corrwipe® eliminates the need for separate bottles of cleaners and has a fresh lemon scent. Antistatic properties are excellent for use on sensitive electronics.

# Maintenance and Operations

With the use of VpCIs the extension of life cycles for vehicles, equipment, or operating systems be it land, air, or sea is done with the same basic procedures used in everyday maintenance procedures. There is no need to purchase additional application or removal equipment. Special facilities are also not necessary!

Elimination of the need for application and storage facilities give the use of Cortec® VpCI® products an extra advantage over other conventional or exotic maintenance and preservation programs. Again, Cortec® can save millions.









# **High Performance Coatings**

All Cortec® coatings deliver exceptional protection, even in extreme outdoor industrial, naval marine, and tropical environments.

Cortec's complex formulas of non-toxic organic inhibitors offer protection far exceeding most paints, primers, and solvent-based products. Many of these unique water-based coatings pose no threat to personnel or the environment. They also offer outstanding permanent or temporary protection even in harsh unsheltered applications.

In many situations, one application of a Cortec® coating serves as both a primer and top coat for needs ranging from temporary shipping protection to years of demanding outdoor industrial or marine use. Little or no surface preparation is required in many cases.

When a Cortec® primer coating is used, you may apply most topcoats with no loss of VpCI® or barrier protective capability. Coatings are available in stock and custom colors, plus UV protection.

For immersion service, epoxy formulations containing VpCI® additives are available for applications such as ballast tanks, pumps, pipelines, and structural steel.





#### **Concrete Structures**

Migrating Corrosion Inhibitors (MCI®), a technology developed by Cortec® researchers, rehabilitate concrete structures which deteriorate due to corrosion of the reinforcing steel. MCI® is added to the concrete mixture during construction of new structures or during the rehabilitation process of old structures. The concrete containing MCI® compound is applied in the normal fashion. The MCI® inhibitor migrates through the old concrete and seeks any ferrous metal in the structure. It attaches to the reinforcing bars and steel mesh, forming a thin protective layer of MCIs. To prevent future corrosion, the MCI® layer prohibits chemical reaction between chlorides and steel in the structure. MCI® inhibitors are effective in fighting high chloride levels from de-icing salts applied to highways and bridges, airborne salts that attack marine structures and other structures near the ocean, and deterioration by acid rain and carbonation. MCI® technology can also protect structures such as tanks and pipes with thermal insulation.

In addition to mixing with concrete at the job site or plant, use Cortec® MCIs as a surface treatment or inject into the concrete structure.





Remove spalled concrete from deteriorating structure.



MCI® migrates through concrete without direct application to steel.



MCI® protects steel from further corrosion.

# Cortec® Biodegradable and Environmentally Friendly Packing and Corrosion Solutions

#### Biodegradable Films EcoWorks®

Eco-Corr® & Eco Film®

Cortec's technological breakthrough of fully biodegradable films was designed to aid businesses and governments in complying with stringent environmental guide-lines. Cortec® Eco-Corr® and Eco Film® were designed to easily biodegrade in outdoor, landfill and compost conditions. Eco-Corr® and Eco Film® are superior to traditional packaging films in many ways. Tests have proven that they are twice as strong as conventional LDPE films. Eco-Corr®, with Cortec's patented Vapor phase Corrosion Inhibitor (VpCI®) protection, is ideal for packaging applications where metal corrosion protection is crucial. Eco-Corr® and Eco Film® are environmentally safe packaging film solutions.



#### EcoAir®

EcoAir® Air-Powered Aerosol products are a major step forward in aerosol technology. For the first time in any industry, we can offer aerosol products that are powered by compressed air rather than traditional chemical propellant. This innovative technology provides products in a four-layer Mylar EcoPouch inside the can. As the valve is depressed, the surrounding pressure expels the bag's contents. EcoAir® products have been specially formulated to improve safety for the consumer as well as the environment. These safety improvements are reflected in the HMIS ratings for each product. The major advantages of EcoAir® technology are:

- Nonflammable
- Spray in any direction, even upside down
- No product contamination by propellant
- Safer to ship and store, with very low or no environmental impact, no CFC's,1,1,1 trichloroethane or other chlorinated solvents.
- •Unique water-based products for tough maintenance applications.



#### EcoLine®

EcoLine® products are based on a renewable resource soybean derivative, soybean methyl esters. Methyl ester building blocks have been used in this revolutionary environmentally low-impact technology. These soya-based products provide excellent lubricity, cleaning action, corrosion protection, and are completely biodegradable. EcoLine® products are better for the environment and leave behind a high performance VpCI® corrosion-protecting layer. EcoLine® heavy duty maintenance products include: no residue cleaner and degreaser, lubricant and penetrant, heavy duty corrosion inhibitor/lubricant, and cutting fluid containing VpCI®.

EcoSpray & EcoClean® products attack the toughest maintenance duties while respecting the environment. They incorporate low toxicity chemicals without aerosols, propellant, or ozone-depleting CFCs. Fast-acting, dependable, and safe to handle, EcoSpray and EcoClean® lead the way in environmentally safe technology.



#### **Metal Protection Guide**

Metals
Cor-Pak <sup>®</sup> Bubbles
Cor-Pak Bubbles Cor-Pak® Cold Seal
Cor-Pak Cold Seal
Cor-Pak Corrugated
Cor-Pak Filli
Cor-Pak <sup>®</sup> Pipe Strip
Cor-Pak <sup>®</sup> Stat. Dis. Bubbles
Cor-Pak <sup>®</sup> Stretch Film
Cor-Pak® Tablets
CorShield <sup>®</sup>
Eco-Corr®
EcoShield <sup>®</sup>
EcoWeave <sup>®</sup>
MilCorr <sup>®</sup>
M529
Corrosorber <sup>®</sup>
Corwipe <sup>®</sup> 500
VpCl <sup>®</sup> -101
VpCl <sup>®</sup> -105/111
VpCl <sup>®</sup> -125
VpCl <sup>®</sup> -126
VpCl <sup>®</sup> -129
VpCI <sup>®</sup> -130 series
VpCI <sup>®</sup> -146
VpCl <sup>®</sup> -150 & 170
ElectriCorr <sup>®</sup> VpCl <sup>®</sup> -238
ElectriCorr <sup>®</sup> VpCl <sup>®</sup> -239
ElectriCorr® VpCl®-286
VpCI <sup>®</sup> -307
VpCl <sup>®</sup> -309
VpCl <sup>®</sup> -316
VpCl <sup>®</sup> -322
VpCl <sup>®</sup> -323
VpCI <sup>®</sup> -324
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VpCI <sup>®</sup> -368
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	CARBON STEEL	STAINLESS STEEL	CAST	ALUMINUM ALLOYS	GALVANIZED STEEL	BRASS (<30%Zn)	COPPER	SOLDER		
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#### **Metal Protection Guide**

Metals	CARBON STEEL	STAINLESS STEEL	CAST	ALUMINUM ALLOYS	GALVANIZED STEEL	BRASS (<30%Zn)	COPPER	SOLDER
VpCl <sup>®</sup> -372	3	3	3	3	3	3	3	3
VpCl <sup>®</sup> -373	3	3	3	3	3	3	3	3
VpCI <sup>®</sup> -374	4	4	4	4	4	4	4	4
VpCl <sup>®</sup> -375	4	4	4	4	4	4	4	4
VpCl <sup>®</sup> -376	3	3	3	3	3	3	3	3
VpCI <sup>®</sup> -377	2	2	2	2	2	2	2	2
VpCI <sup>®</sup> -378	2	2	2	2	2	2	2	2
VpCI <sup>®</sup> -379	2	2	2	2	2	2	2	2
VpCI <sup>®</sup> -383	4	4	4	4	4	4	4	4
VpCI <sup>®</sup> -386/387	4	4	4	4	4	4	4	4
VpCI <sup>®</sup> -388	4	4	4	4	4	4	4	4
VpCI <sup>®</sup> -389	4	4	4	4	4	4	4	4
VpCI <sup>®</sup> -392	4	4	4	4	4	4	4	4
VpCI <sup>®</sup> -393	5	5	5	5	5	-	-	-
VpCl <sup>®</sup> -395	4	4	4	4	4			
VpCl <sup>®</sup> -396	4	4	4	4	4			
VpCl <sup>®</sup> -398	3	3	3	3	3	3	3	3
VpCl <sup>®</sup> -399	3	3	3	3	3	3	3	3
VpCl <sup>®</sup> -411	2	2	2	2	2	2	2	
VpCl <sup>®</sup> -414	2	2	2	2	2	2	2	2
VpCl <sup>®</sup> -415	2	2	2	2	2	2	2	2
VpCl <sup>®</sup> -416	2	2	2	2	2	2	2	2
VpCl <sup>®</sup> -417	2	2	2	2	2	2	2	2
VpCl <sup>®</sup> -418	2	2	2	2	2	2	2	2
VpCl <sup>®</sup> -419	2	2	2	2	2	2	2	2 2 2 2 2 2 2 2
VpCI <sup>®</sup> -422/423	3	3	3		3	3	3	2
VpCI <sup>®</sup> -425	3	3	3		3	3	3	3
VpCI <sup>®</sup> -426	3	3	3	3	3	3	3	3
VpCl <sup>®</sup> -427/428				3	3			3
VpCl <sup>®</sup> -432/433	4	4	4	4	4	4	4	3
VpCl <sup>®</sup> -605	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -609/611	5	5	5	5	5			
VpCl <sup>®</sup> -615	1	1	1			1	1	
VpCl <sup>®</sup> -617	1	1	1			1	1	
VpCl <sup>®</sup> -619/658	3	3	3	3	3		3	
VpCI <sup>®</sup> -629	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -637	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -639	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -641	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -644	5	5	5	5	5	5	5	5
VpCl <sup>®</sup> -645	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -646	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -647	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -649	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -658	3	3	3	3	3	3	3	3
VpCI <sup>®</sup> -705	5	5	5	5	5	5	5	5
VpCI <sup>®</sup> -812/819	3	3	3	3	3	3	3	3
VpCI <sup>®</sup> -1238	2	2	2	2	2	2	2	2

#### **Exposure Limitations**

VpCI<sup>®</sup>-369

- 1. **Enclosed.** For use in non-ventilated equipment housings, control boxes, or other enclosures. Packaged in cardboard, paper, plastic wrap or metal containers.
- 2. Inside. In addition to the condition described above, for use in uncovered/inside storage.
- 3. Outside sheltered. In addition to the two conditions described above, for use in sheltered/outside storage.
- 4. Outside. In addition to the three conditions described above, for use in uncovered/outside storage.
- **5. Immersion.** In addition to the four conditions described above, also for immersion service in corrosive liquids such as salt water, crude oil, etc.





Not Recommended or Test Data Not Available

## **V<sub>D</sub>CI<sup>®</sup> ELECTRONIC PRODUCTS**

VpCI®-101 Impregnated Foam Device, Patented Unique dual action: desiccant/VpCI® protection.



VpCI® impregnated foam for multimetal protection. Comes with adhesive backing and individually packaged in plastic. Each device is 1.25" (32 mm) wide, 3" (76 mm) long, and 0.25" (6 mm) thick. Use one device per 1.0 cu. ft. (28 l) of enclosed space. Nitrite free, non-toxic, non-polluting.

NSN 6850-01-338-1392 • Package: 50 per carton.

• Used by global military personnel

#### VpCI®-110 Foam Emitter, Patented



unique dual action: desiccant/VpCI® protection. Breathable, open-cell foam cylinder, nitrite free, for multimetal protection. Comes with adhesive backing and individually packaged in plastic. The emitter is 2.5" (64mm) in diameter, and 2" (51 mm) high. Use one emitter per 10 cu. ft. (283 l) of enclosed space.

NSN 6850-01-456-2971

MIL I-22110C (Comm. Equiv.)

Package: 12 per carton.

#### VpCI®-105/111 Plastic Emitter, Patented





Unique dual action: desiccant/VpCI® protection.

Tyvek® breathable membrane, plastic cartridge filled with nitrite free VpCI®, for multimetal protection. Comes with adhesive backing and is individually packaged in plastic. The VpCI®-105 emitters are compact to fit modern electronic enclosures [2.3" (58 mm) in diameter and .75" (19 mm) high]. Use one emitter for 5 cu. ft. (142 l) of enclosed space. VpCI®-111 [2.3" (58 mm) in diameter and 1.27" (32 mm) high]. Protects 11 cu. ft. (311 l).

VpCI®-105 NSN 6850-01-406-2060, MIL I-22110C (Comm. Equiv.) VpCI®-111 NSN 6850-01-408-9025, MIL I-22110C (Comm. Equiv.) Package: 20 per carton VpCI<sup>™</sup>-105, and 10 per carton VpCI<sup>™</sup>-111.

Used by global military personnel

#### ElectriCorr® VpCI®-238/239



Multifunctional formulation providing three-way protection: multimetal corrosion protection, antistatic and cleaning action. Corrosion inhibiting spray provides dry, ultrathin, protective film. For use in enclosed environments on electronic equipment and components. Will not alter electrical resistance, magnetic or thermal properties. VpCI®-239 is the outdoor version of VpCI®-238. NSN 6850-01-413-9361

Package: 12 oz. (340 gram) aerosol or EcoSpray® 238 pump spray, 16 oz. (0.47 liter), 5 gallon (19 liter) pails and 55 gallon (208 liter) drums.

· Used by global military personnel

#### ElectriCorr® VpCI®-286

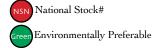
Nonconductive acrylic conformal coating that combines excellent moisture and corrosion resistance with Cortec's patented vapor corrosion inhibitor technology. Package: 11 oz. aerosol cans (312 gram), 5 gallon (19 liters) pails, 55 gallon (208 liters) drums, totes and bulk.

#### Corrosorber®

Scavenges corrosive gases from the atmosphere, providing passive protection against corrosion, oxidation and rust.

Package: 10 individually wrapped cartridges per carton.

#### OPL Listed Military Specification CommercialEquivalent



## V<sub>D</sub>CI<sup>®</sup> PACKAGING PRODUCTS

VpCI®-125 Static Dissipative Film, Patented



Unique multifunctional film: VpCI®/desiccant action and ESD protection Transparent, multimetal protection, heat sealable. Protect against triboelectric charge generation and corrosion. Recyclable.

MIL A-22010A(1) (Comm. Equiv.) MIL PRF-81705D (Comm. Equiv.) Package: Standard and custom sizes.

· Used by global military personnel

#### VpCI®-125 Clean Film

Unique multifunctional film: VpCI®/desiccant action and ESD protection. VpCI®-125 film that has been cleaned to NASA JSCM 5322 Level 100. Used for highly sensitive electronic and aerospace parts protection. Package: Custom sizes.

• Used by global military personnel

#### VpCI-126®



#### Multimetal LDPE Heat Sealable Film, Patented

Unique dual action: desiccant/VpCI® protection. Transparent plastic films with VpCI® for multimetal protection. Heat sealable. Also available in Zip-Lock® bags, and Shrink film varieties. This product is recyclable.

MIL PRF-22020D(1) (Comm. Equiv.)

Package: Standard and custom size bags, tubing and sheeting.

•VpCI-126® MIL(custom sizes available) QPL 4350-0B120(3) • MIL PRF-22019D(1)



· Used by global military personnel

#### VpCI®-129 HDPE Film

High-density polyethylene (HDPE) film extruded with Vapor phase Corrosion Inhibitors (VpCI®). Has high barrier properties and MVTR. Maintains a vacuum for extended periods of time. Exceptional seal strength can be attained. Package: Custom sizes up to 60" wide (152 cm).

#### VpCI®-130 Series Impregnated Foam Shapes, Patented





Multifunctional action: desiccant/VpCI® protection/static dissipative. VpCI®-131, 132, 133, 134, 137 are impregnated foams for ferrous and nonferrous protection. Available in a variety of sizes. Nitrite free, non-toxic. ESD properties, and vapor corrosion inhibiting.

#### •VpCI®-133

NSN 6950-01-426-3539, MIL PRF-81705D(Comm. Equiv.)

Package: Standard and custom sizes available.

#### VpCI®-144 EcoShield® Paper





Multimetal VpCI® barrier coated paper. Excellent moisture barrier. Replaces polyethylene coated papers, recyclable, repulpable, non-toxic and biodegradable. MIL PRF-3420G (Comm. Equiv.).

Package: Standard and custom size roll stock and sheeting.



VpCI®-146 Multimetal Inhibitor Paper, Patented VpCI® kraft paper protects ferrous and non-ferrous metals. Nitrite and chro-

mate free. Fully recyclable. MIL PRF-3420G (Comm. Equiv.).

Package: Standard and custom size roll stock and sheeting.

· Used by global military personnel

#### VpCI®-150 & 170 Impregnated Foam Tapes, Patented





Unique dual action: desiccant/VpCI® protection. Flexible, protective tapes impregnated with VpCI® for multimetal protection. Comes with adhesive backing. Easily cut to length to protect various size enclosures. Nitrite free VpCI® material.

NSN 8030-01-208-1769, NATO 8030-00-244-1299

MIL PRF 81705D(Comm. Equiv.)

Package: 6 rolls per carton VpCI®-150, and 1 roll per carton VpCI®-170.

• Used by global military personnel

#### Corrlam® VpCI® Barrier laminate



Heavy Duty Barrier-Foil/VpCI® polyethylene laminated structure.

Exceptional protection of moister-sensitive and oxygen sensitive metal parts. Ideal for vacuum packaging.

MIL PRF-131J(Comm. Equiv.)

Package: Available in custom sizes as pouches, covers, blankets, etc.

#### CorrNetting

CorrNetting is extruded (non-woven) from the highest quality PE resin and Cortec® multimetal VpCIs. Offers very effective packaging, which combines physical protection, cushioning and multimetal corrosion protection for sensitive mechanical parts and other sensitive materials.

Package: Available in a variety of different mesh and diameters, in tubular form or in flat sheeting.

#### Cor-Pak® 1-MUL Breathable Pouches, Patented



Tyvek® breathable membrane filled with multimetal  $\overline{\text{VpCI}}$ ® (1-MUL). For applications where powder contamination is not acceptable.

NSN 6850-01-470-2737 GSA 8030-01-208-1769 Package: 300 per carton.

#### Cor-Pak® VpCI® Tablets



All purpose  $VpCI^{\circledcirc}$  for multimetal applications. Insert into packages. Nitrite free, non-polluting, for non-ferrous and ferrous metals.

MIL I-22110C (Comm. Equiv.)

Package: 1000 per bottle, 4 bottles per carton.

#### Corrcaps VpCI® Protective Covers

Elastic sewn on to VpCI-126® or EcoWeave® to create a "cap" that protects exposed brake assemblies on vehicles. Excellent protection and easy application. Can be sewn from 1" (2.5 cm) diameter to over 24" (60 cm) diameter . Package: Custom sizes.

#### CorShield® VpCI® Packaging Fabric, Patented



A multiple-layered protective fabric with a non-woven, soft inside layer. CorShield® is made from low-density polyethylene tapes, a high-density coating

and is extrusion laminated.

MIL P-58102 (Comm. Equiv.)
Package: Standard and custom sizes available.

• Used by global military personnel

#### Cor-Pak® VpCI® Bubbles, Patented

NEW unique dual action: desiccant/VpCI® protection. Designed for cushioning, dunnage, void fill and interleaving. VpCI® contained in bubble film provides multimetal protection. Recyclable.

Package: Standard and custom size sheeting, pouches and bundles.

#### Cor-Pak® VpCI® Static Dissipative Bubbles

Packing bubbles provide cushioning VpCI® protection while preventing triboelectric charge generation.

Package: Available in custom size rolls.

#### Cor-Pak® VpCI® Cold Seal Film



Cohesive system with VpCI® protection. Available in paper and polyethylene. Sticks firmly and only to itself.

Package: Custom size roll stock.

• Used by global military personnel

#### Cor-Pak® VpCI® Corrugated PE Sheeting

FDA approved, 100% recyclable packaging material. Easily fabricated into boxes, containers and custom totes.

Package: Available in custom size sheeting.

#### Cor-Pak® VpCI® Liner Film

Exceptionally light (18 microns) and strong HDPE film for foam-in-place as well as for other wrapping and interleaving applications. Multimetal. Recyclable, Excellent barrier, tear and premature resistance.

Package: Available in single sheeting in 36 and 48 (91 and 122 cm) widths

• Used by global military personnel

#### Cor-Pak® VpCI® Pipe Strip

Low density, polyethylene rod containing  $\mathrm{VpCI}^{\circledR}$ . Designed for protection of ferrous and non-ferrous metals and alloys.

Package: 500 ft. (152 m) of .25" (6.35 mm) diameter strip wound on a spool.

#### Cor-Pak® VpCI® Stretch Film, Patented

NEW unique dual action: desiccant/VpCI® protection. Holds protected parts securely in place, transparent. Does not leave residue on parts. Multimetal protection. Available in machine and handwrap grades. This product is recyclable.

Package: Standard and custom roll stock.

• Used by global military personnel

#### EcoShield® VpCI® Packaging Fabric



EcoShield® is a patented, multiple-layered protective fabric with a non-woven, soft inside layer. Can be custom sewn. Available in blue or black.

MIL P-58102 (Comm. Equiv.)

Package: Standard and custom sizes available.

• Used by global military personnel

#### MilCorr® Shrink Film



Composite film, containing the ultimate additives package; Cortec® multimetal VpCIs (Vapor Corrosion Inhibitors), and UV (ultraviolet) inhibitors to provide a top-notch universal protection system.

•Cor-Pak® Ex Film •Corrlam Clean •Room Film

MIL PRF-121G (Comm. Equiv.)

Package: Sheeting and tubing form. Thickness from 10-12 mils (250-300 microns).

• Used by global military personnel

# **V<sub>P</sub>CI®** HIGH PERFORMANCE COATINGS

#### VpCI®-365 Cor-Mastic

Formulated as a replacement for typical mastic epoxies, VpCI®-365 incorporates Vapor phase Corrosion Inhibitors for the ultimate corrosion protection. Excellent for immersion applications.

Package: 7.5 gallon (28.5 liter) kits (1 per carton).

#### VpCI®-367 Liquid for Outdoor Protection

Solvent-based, non-tacky, temporary coating that provides outdoor, multi-metal protection. Excellent for use at elevated temperatures, and the coating will not run. Apply by spraying, dipping, brushing, or rolling.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-368 Liquid for Outdoor Protection





Solvent-based, temporary coating that provides extended outdoor, multimetal protection. Leaves a translucent, waxy finish that is scratch resistant and self-healing. Can be removed with common solvents.

#### VpCI®-368M



NSN 8030-00-062-6950, NSN 8030-00-231-2345, NSN 8030-00-244-1300, NSN 8030-01-470-2601, NATO 6850-66-132-5848, NATO 6850-66-132-6099 MIL STD-2218 (Comm. Equiv.)

#### VpCI®-369 Liquid Concentrate

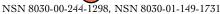




Oil-based barrier coating that provides extended, outdoor, multimetal protection. Leaves a translucent, oily film that is scratch resistant and self-healing. Product can be diluted with oil. Apply by spraying, dipping, brushing or rolling. Can be easily removed with common solvents.

NSN 8030-00-244-1297, NSN 8030-00-244-1295, NSN 8030-01-149-1731, MIL PRF-16173E (Comm. Equiv.)

#### •VpCI®-369M



QPL 4620-1535(2)

MIL PRF-16173E

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. Also available in aerosol form CorShield® 369 12 oz. (0.35 L) cans.

• Used by global military personnel

#### VpCI®-373 Wash Primer





Water-based, fast drying surface treatment product designed as a replacement for phosphate, and chromate treatments.

NSN 8030-01-470-2739

MIL P-15328D (Comm. Equiv.) when used as a bonding primer. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and liquid totes.

• Used by global military personnel

#### VpCI®-377 Water-Based Rust Preventative



Water-soluble, biodegradable, rust preventative concentrate designed as a direct replacement for oil-based rust preventatives.

Leaves a transparent, dry film and can be used at low concentrations. NSN 8010-01-502-9727

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk, and EcoAir® VpCI®-377 13 oz. (369 gram) cans.

Used by global military personnel

#### VpCI®-383 Thin Film Coating

Water-based, acrylic clear coat that provides multi-metal corrosion protection. Can be used as a direct-to-metal primer or as a finish coat. Provides a medium-high gloss finish that is UV stable.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and liquid totes

#### VpCI®-386 Aluminum

Water-based primer/topcoat, that provides protection from UV and abrasion for metals in harsh outdoor, unsheltered applications. Exceptional resistance based on a combination of organic-based inhibitors and an aluminum pigment. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) kit, liquid totes and bulk

• Used by global military personnel

#### VpCI®-386 FR (Fire Retardant) Top Coat

A coating which passes ASTM D-3806-79 fire retardant test and provides corrosion protection.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

· Used by global military personnel

#### VpCI®-386 Water-Based Acrylic Coating



Water-based, acrylic coating that provides extended protection for both indoor and outdoor protection. Can be used as a direct-to-metal coating or as a finish coat.

Available in standard and custom colors and as a clear coat.

NSN 8030-01-481-8897

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and liquid totes.

• Used by global military personnel

#### VpCI®-387 High-Build Coating

A high-build, water-based coating that provides extended outdoor protection for any metal surface. Provides excellent resistance to high heat, humidity and salt air. Available in standard and custom colors.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

• Used by global military personnel

#### VpCI®-388 Water-Based Temporary Coating



Water-based, temporary coating for both indoor, and outdoor corrosion protection. Leaves a film that is clear and dry. Can be easily removed, and is low in VOC's. Custom colors available.

NSN 8030-01-481-8898

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and liquid totes.

• Used by global military personnel

#### VpCI®-389 Water-Reducible Temporary Coating

Water-borne temporary coating for outdoor storage protection. Leaves a translucent, waxy coating that is easily removable. Low in VOC's and dilutable with water.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

• Used by global military personnl

#### VpCI®-391 Water-Based Temporary Coating

Water-based temporary coating for outdoor protection. Leaves a translucent, dry coating that can be removed with D-limonene cleaners or other solvents. Similar in corrosion protection to  $\mathrm{VpCI}^{\circledR}\text{--}389.$  Custom colors available. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and liquid tote

#### VpCI®-395 Water-Reducible Epoxy Primer

Water-reducible, epoxy primer that provides superior corrosion protection in most environments. Can be applied by spraying, brushing or rolling. Package: 5 gallon (19 liter) kits.

#### VpCI®-396 Moisture-Cured Urethane Primer

Aluminum filled, moisture-cured urethane primer meant for application to structural steel. Provides a hard, flexible primer that can be topcoated with most conventional urethane coatings.

Package: 1 gallon (3.8 liter), 5 gallon (19 liter) pails.

#### VpCI® CorrVerter®

Water-based corrosion converting primer that is meant for application to rusted surfaces. Contains a chemical chelating agent that converts the rust to a paintable surface.

Package: 16 oz. (0.451) jars, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

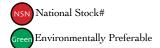
#### CorShield® VpCI® Gold

A brillant true gold colored water based coating.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel





#### CorShield® VpCI® Strippable Coating

Water-based, non-flammable, temporary strippable coating which is availlable in clear and colors.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

• Used by global military personnel

#### CorShield® VpCI® Transit Coating

Water-reducible concentrate for transit protection of painted and unpainted surfaces. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

## **VpCI® METALWORKING PRODUCTS**

#### VpCI®-316 Liquid Concentrate

Synthetic, water-based inhibitor formulated for the protection of yellow metals. Provides lubrication and cooling properties during operation and dries to a transparent film.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-322 Oil-Based Concentrate



Oil-based concentrate for use as an additive to various lubricating systems that is suitable for both operating and lay-up applications. May also be fogged into internal cavities for corrosion protection.

MIL PRF-46002C (Comm. Equiv.),

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-323 Oil-Based Concentrate



Oil-based concentrate for use as an additive in engine systems, and is suitable for both operating and lay-up applications. Provides corrosion protection both in contact and in the vapor phase. Also available in a higher flashpoint version (VpCI®-323M).

MIL PRF-46002C (Comm. Equiv.), MIL I-85062 (Comm. Equiv.)

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-324 Lubricating Oil

USDA approved lubricating oil for use on machine parts that may be in contact with food. Formulated with biocides to help minimize bacterial growth.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. Also available in  $EcoAir^{(0)}$ , 10 oz. (283 gram) cans.

#### VpCI®-325 Lubricant/Corrosion Inhibitor





Ready-to-use thin film oil based liquid for multi-metal corrosion protection. Provides excellent protection to finely machined surfaces such as gun barrels, honed or mirror-like finishes.

NSN 6850-01-517-1652, MIL C-81309 (Comm. Equiv.)

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-326 Oil-Based Concentrate





Oil-based concentrate for use as an additive to hydraulic systems. Contains corrosion inhibitors for protection of both ferrous and non-ferrous metals. Suitable for both operating and lay-up applications and will pass through a 1-micron filter.

NSN 6850-01-470-3358, NATO 6850-66-132-6100

MIL PRF-46002C (Comm. Equiv.), MIL I-85062 (Comm. Equiv.),

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-327 Solvent-based Concentrate



Ready-to-use, solvent-based rust preventative for indoor corrosion protection. Formulated for the removal of finger prints and other stains from metal surfaces. MIL C-15074E (Comm. Equiv.), MIL C-81309 (Comm. Equiv.)

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-329 Oil-Based Concentrate





Oil-based concentrate for use in gearboxes, crankcases and other lubrication systems. Provides excellent corrosion protection in both the liquid, and vapor phases. Also available in super concentrate (VpCI®-329SC), ready-to-use (VpCI®-329D) versions.

NSN 6850-01-470-3359, NATO 6850-66-132-6100

MIL PRF-46002(1) (Comm. Equiv.), MIL I-85062 (Comm. Equiv.)

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-337 Liquid Concentrate

Water-based concentrate that is excellent for fogging of internal spaces of pipes, tanks, and containers. Also provides excellent protection when used as an edge spray for shipping and storage applications. Contains vapor phase corrosion inhibitors for multi-metal protection.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. Also available in EcoAir®, 13 oz. (369 gram) fogger can.

#### VpCI®-338 Liquid Corrosion Inhibitor

Water-borne corrosion inhibitor that is excellent for edge-treating of coils and sheet metal stacks and for fogging of internal enclosures. Particularly effective on ferrous metals, aluminum, and tin-plate. Also available as a super concentrate  $VpCI^{@-}338SC$ .

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-344 Water-Borne Coolant/Lubricant

Water-borne corrosion preventative coolant for use in wet tempering of galvanized or cold-rolled steel. Also can be used in light machining operations where some lubrication is required.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-345 Coolant/Lubricant

Semi-synthetic coolant/lubricant for heavy duty machining operations such as cutting, grinding, and stamping. Provides excellent multi-metal corrosion to both equipment and machined parts.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-347 Heavy Duty Lubricant





Soluble-oil based lubricant for use in heavy duty machining operations. Excellent for use in drawing, broaching, turning, cutting and stamping operations.

Effective in dilutions as low as 1:40 in water.

 $NATO\ 6850-66-132-6101,\ NATO\ 6850-66-132-6102,\ NSN\ 6850-01-470-2740$   $Package:\ 5\ gallon\ (19\ liter)\ pails,\ 55\ gallon\ (208\ liter)\ drums,\ liquid\ totes\ and\ bulk.$ 

• Used by global military personnel

#### VpCI®-378 Water-Reducible Rust Preventative

Water-emulsifiable replacement for oil-based rust preventatives. Forms a stable emulsion in water and can provide long-term protection for indoor and sheltered outdoor applications. VpCI®-378 also works very well as a quenching fluid. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

#### VpCI®-379 Water-Based Rust Preventative



Water-based corrosion preventative concentrate designed to be used as a replacement for oil-based chemistries. Provides multi-metal protection for long-term indoor storage/shipping applications.

NSN 8030-01-481-8928

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### SURFACE PREPARATION PRODUCTS

#### VpCI®-408

Foam-free, neutral pH cleaner-degreaser for removing light-medium oil deposits. Meant for use in high pressure parts washers and provides short-term corrosion protection after cleaning.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-411/411 Gel



Heavy-duty, water-reducible, D-limonene cleaner/degreaser designed for extra tough cleaning jobs in industrial and commercial applications. Available in a gel form for hard-to-reach surfaces. Both provide flash corrosion protection. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-414 Cleaner/Degreaser



Viscous liquid concentrate designed to remove temporary coatings from bare metal and painted surfaces. Can also be used to remove waxes, dirt, oil, greases and difficult to remove contaminants. Provides short-term, multi-metal protection after application.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, bulk and EcoAir® VpCI®-414 13 oz. (369 gram) cans.

• Used by global military personnel

#### VpCI®-416 Cleaner/Corrosion Inhibitor

Heavy-duty, alkaline cleaner and degreaser that can be used in industrial applications. Effective in neutralizing metal surfaces after acid cleaning or pickling operations. Also can provide corrosion protection for up to 6 months during indoor storage.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-417 Cleaner and Degreaser (Powder), Patented

Heavy-duty cleaner and degreaser developed for cleaning industrial equipment. Works very well in both power washers and ultrasonic equipment. Low foaming formulation that is phosphate free. Provides short-term, multi-metal corrosion protection after cleaning.

Package: 50 lb (23 kg) boxes and 100 lb (45.4 kg) drums. Safe-T-Charges 5 lb (2.3 kg) water soluble bags.

• Used by global military personnel

#### VpCI®-418/418L, Patented

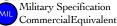
Heavy-duty alkaline cleaner and degreaser for use in industrial cleaning equipment. Non-foaming cleaner that provides multi-metal corrosion protection after the cleaning process.

Package: (VpCI®-418): 50 lb (23 kg) boxes, and 100 lb (45.4 kg) drums. (VpCI®-418L): 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid tote and bulk. Safe-T-Charges 5 lb (2.3 kg) water soluble bags.





National Stock#





#### VpCI®-419 Cleaner/Degreaser Concentrate

Heavy-duty cleaner and degreaser concentrate developed for cleaning industrial, oilfield, refinery and marine equipment. Provides temporary corrosion protection to ferrous metals.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-422 Organic Rust Remover





Environmentally friendly, biodegradable rust and tarnish remover for ferrous and non-ferrous metals. Incorporates VpCI® technology so that it is not aggressive to the metal substrate. Will not harm human skin, most paints, plastics, rubber, or other materials.

NSN 6850-01-482-4534

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-423 Organic Rust Remover Gel





Gel version of  $\mathrm{VpCI}^{\otimes}$ -422 that is excellent for application to vertical surfaces and hard to reach areas.

NSN 6850-01-482-4536

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. Also available in EcoClean® 423, 16 oz. (0.47 liter) pump spray bottle and EcoAir® VpCI®-423 16 oz. (397 gram) cans.

• Used by global military personnel

#### VpC I®-425 Neutral Rust Remover Powder

Environmentally friendly, biodegradable organic rust remover powder. Effective in low dosages for removal of rust, oxidation, and scale. Package: 5 lb (2.3 kg) boxes, 50 lb (23 kg) boxes and 100 lb (45.4 kg) drums.

#### VpCI®-426 Rust Remover



Heavy-duty, liquid concentrate to remove rust, scale, and oxidation from virtually any metal surface. Especially effective in removing oxidation from aluminum, carbon steel, stainless steel, and copper. Incorporates VpCI® technology. NSN 6850-01-477-4155

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-426 Gel Rust Remover

Gel version of  $\mathrm{VpCI}^{\otimes}$ -426 that is excellent for application to vertical surfaces and hard to reach areas.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-426 Powder Rust Remover, Patented

Non-hazardous, water-soluble powder, that is used in low dosages for removal of rust, scale, oxidation and tarnish. Has a working pH of between 3-4, and is especially effective for cleaning stainless steel. Works very well in ultrasonic applications. Package: 50 lb (23 kg) boxes and 100 pound (45 kg) drums. Safe-T-Charges 5 lb (2.3 kg) water soluble bags.

#### VpCI®-427/428 Aluminum Cleaner

Water-based, liquid concentrate that dissolves oxides/scale from aluminum. VpCI®-428 is a thixotropic, gel version that will cling to vertical surfaces.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-432/433 Paint Remover

Heavy-duty liquid or gel paint stripping formulation designed to remove paints and coatings. Particularly effective for removal of alkyds, acrylics and urthane. Can be used on metal, concrete, and wood surfaces. VpCI®-433 is a gel version of VpCI®-432.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

#### Corwipe® 500 Heavy Duty Cleaner, Degreaser, Anti-stat & Protectant Wipe, Patented

Multi-purpose wipe cleans while leaving behind a protective antistatic and VpCI<sup>™</sup> film. Removes oil, grease and light rust. Based on strong Dupont's Sontara<sup>®</sup> non-woven fabric. Wipes are 8" x 10" ( $20.3 \times 25.4 \text{ cm}$ ), folded into 5" x 11" ( $12.7 \times 29.7 \text{ cm}$ ) pouches.

Package: 144 per carton (12 wipes per pouch, 12 pouches per carton).

• Used by global military personnel

#### Safe-T Charges (VpCI®-417/418/426)

Cleaners and rust remover in water-soluble bags. Safe and easy way to use powder products. Refer to individual products for descriptions. Package: 1 lb (0.45 kg), 5 lb (2.3 kg) and 10 lb (4.54 kg) bags.

#### **WATER/OIL ADDITIVES**

#### M-529 Additives for Oil and Lubricants

Is an oil-based package of corrosion inhibitors for lubricating oils. M-529, a rust preventive, provides excellent protection during operating conditions and intermittent operation.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-605 De-icing Salt Additive

A non-toxic, environmentally friendly corrosion inhibitor designed specifically as a de-icing salt additive to prevent corrosion due to chlorides.

Package: 5 lb. (2.3 kg), 50 lb. (23 kg) and 100 lb. (45 kg) lined drums.

#### VpCI®-611

Additive for hydro testing, wet blasting and flash rust prevention for ferrous metals. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

#### VpCI®-615 Corrosion Inhibitor for Boilers

Phosphonate-based long-term corrosion inhibitor which protects low to medium pressure boilers.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-617 Boiler Water Treatment

Water soluble, provides long-term protection against corrosion and scale formation. Suitable for low to medium pressure boilers.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### VpCI®-629 Inhibitor for Oil, Gas and Petrochemical Processing

Concentrated inhibitor that forms inhibitive layer to protect internal surfaces of process equipment, pipelines, tanks, vessels, reactors, valves, etc. Used for transportation and storage of hydrocarbon liquids and some gases.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-629D/HF/SC Inhibitor for Oil, Gas and Petrochemical Processing

Inhibitor for low temperature environments with similar properties of VpCI®-629. HF is a high flash point version, and SC is a super-concentrated version. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-637 Inhibitor for Gas Flow and Transmission Lines

Provides internal corrosion protection for gas flow and gas transmission lines. Effective against water, corrosive gases and chloride contamination.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-638

FDA-acceptable rust preventative concentrate for closed loop applications. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### VpCI®-639 High Temperature Inhibitor for Oil, Gas and Petrochemical Processing

Inhibitor for high temperatures in oil and gas wells, refineries, gas processing, petrochemical processes and other hydrocarbon processes.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-641 Corrosion Inhibitor for Fresh Water

Water-based rust preventative for the protection of ferrous or nonferrous metals in industrial waters. Especially suited for closed loop systems and hydrotesting.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### VpCI®-644 Corrosion Inhibitor for Brines

Corrosion inhibiting additive for ferrous and non-ferrous metals for water containing inorganic salts, including chlorides.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes or bulk.

#### VpCI®-645 Marine Usage Corrosion Inhibitor

A non-toxic, biodegradable concentrate designed to provide long-term effectiveness in fresh water, salt water, brine and other highly corrosive solutions containing dissolved sulfide and halogens.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### VpCI®-646 Ambiodic Water Treatment System

Water soluble treatment protects cooling and industrial process water systems against corrosion, scale and fouling. Environmentally safe. Open and recirculating loops corrosion and scale inhibitor.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### VpCI®-647

Corrosion and scale inhibitor liquid concentrate for use in open recirculating cooling water systems.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### VpCI®-649 Liquid/Powder for Multimetals

Water soluble inhibitor for multimetals. Recommended for closed loop cooling systems. Effective at low dosages. Also available in powder form. Corrosion inhibitor for cooling systems.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

• Used by global military personnel

#### VpCI®-705 Fuel Additive

Corrosion preventive additive for gasoline, diesel, gasohol mixtures and alcohol fuels that also works as fuel stabilizer and water emulsifier. Soluble in both methanol blends as well as neat methanol fuel or neat gasoline. Approved by General Motors Corporation (approval #1066180 GM EMD Division). Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### VpCI®-1238 Liquid Additive for Vapor Degreasing, Cleaning & Stripping Baths

Liquid concentrate additive boosts protection for ferrous and some non-ferrous parts processed in vapor degreasing, cleaning and stripping baths, as well as for conventional solvent cleaning/degreasing systems.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

# CONCRETE/CONSTRUCTION PRODUCTS

#### VpCI®-619 Undercoating for Insulated Surfaces

A water-based protective coating for metal surfaces that will be subsequently covered with thermal insulation. High temperature resistant formulation. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### MCI® Architectural Coating

MCI® containing water-born sealer/coating for all reinforced, pre-cased, prestressed, post-tensioned or marine concrete structures. Can be applied to the concrete and/or used as a rebar coating.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

#### MCI® Coating for Rebar

MCI® coating for rebar: provides protection for embedded rebar and during storage. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### MCI® Film

Black PE film designed for use in the construction industry as a vapor barrier, Provides corrosion protection and UV protection.

Package: Standard and custom sizes

#### MCI® Grenade®

Migratory Corrosion Inhibitors packaged in water-soluble PVA bags. One grenade adds corrosion prevention to one cubic yard (0.76 m3) of concrete.

Package: 1 bag (500 g) per box.

#### VpCI®-658 Undercoating for Insulated Surfaces

A liquid inhibitor for corrosion, protection of metal surfaces covered with thermal insulation. Able to be injected into insulation that is already in place to protect the metal underneath.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

#### MCI®-1999/2000 Admixture for Concrete, Patented

Used to prevent corrosion of rebar in concrete. To be added to concrete mix. Conforms to ASTM G-109.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### MCI®-2001 Admixtures, Patented

 $MCI^{\circledast}\text{-}2001$  is a powdered form of MCI  $^{\circledast}\text{-}2000$  . It is a Migratory Corrosion Inhibitor and concrete admixture.

Package: 2001-50 lb. (22.7 kg) pails and 100 lb. (45.4 kg) drums. 2002-5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### MCI®-2003 Gel for Existing Concrete Structures

An injection treatment for existing concrete to prevent corrosion of embedded steel, especially in areas subject to cracks and spalling.

Package:  $16 \, \text{oz.} \, (.47 \, \text{liter}) \, \text{cartridges}, 5 \, \text{gallon} \, (19 \, \text{liter}) \, \text{pails}, 55 \, \text{gallon} \, (208 \, \text{liter}) \, \text{drums}.$ 

#### MCI®-2005 Water-Based, Admixture for Concrete, Patented

Water-based admixture used to prevent corrosion of rebar in concrete. Also available in NS version. Conforms to ASTM G-109.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### MCI®-2006 Powdered, Admixture for Concrete

Powdered admixture used to prevent corrosion of rebar in concrete. Based on MCI®-2005 technology. Also available in NS version.

Package: 50 lb. (22.7 kg) drums and 100 lb. (45.4 kg) drums.

#### MCI®-2007 CorrCrete

Containing MCI<sup>®</sup> technology, this water-reducing superplasticizer increases thflowability of concrete, in addition to controlling corrosion of rebar. Quilified to MIL-SPEC ASTM C-494 Type G high range water reducing/retarding admixture requirements. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### MCI®-2010/2011 Emitters for Concrete, Patented

Powder packed MCI® Emitters offering the ease of renewable protection. Package: 20 per carton.

#### MCI®-2020 Surface Treatment for Concrete Structures, Patent Pending

For surface treatment or injection in concrete to prevent corrosion of embedded steel. Quilified to MIL-SPEC NSF 61 for indirect contact with drinking water. Available in powder form. MCI®-2020VO available for vertical applications. Conforms to ASTM-G109.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

Powder package: 100 pound (45 kg) bags.

#### MCI®-2021 Concrete Sealer, Patent Pending

Concrete silicate sealer with Migrating Corrosion Inhibitors for the protection of concrete and rebar in concrete.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### MCI®-2022 Sealer, Patented

Silane-siloxane penetrating waterborne, vapor-permeable, water-repelling sealer for concrete, brick, masonry units, etc. Available as MCI®-2022VO (for vertical applications). Contains MCI® molecules.

Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

#### MCI®-2023 Passivating Grout

Two component cementitious coating for exposed reinforced bars and other steel structures. Contains MCI® molecules.

Package: Powder: 26.4 lb. (12 kg) buckets.

Resin: 11 lb. (5 kg) pails.

#### MCI®-2025

Two-component, cement-based elastomeric coating containing MCI® (Migrating Corrosion Inhibitors).

Package: Component A is available in 55 pound (25 kg) bags. C 0

#### MCI®-2038 Finish Repair Mortar

Two component fiber reinforcing finish repair mortar containing Migrating Corrosion Inhibiting additives.

Package: 55 lb. (25 kg) bags, 11 lb. (5 kg) pails.

#### MCI®-2039 Concrete Repair Mortar

Two component, fiber reinforced repair mortar. Excellent adhesion properties, vapor transmission qualities. Can be used for any type of concrete repair. Contains MCI® additive.

Package: 55 lb. (25 kg) bags, 11 lb. (5 kg) pails.

#### MCI®-2050 Release Agent

Water based release agent that prevents "build-up" of concrete, asphalt, dirt and other debris on concrete forms or other construction equipment while preventing corrosion of metal surfaces.

Package: 5 gallon (19 liter) pails and 55 gallon (208 liter) drums.

#### MCI®-2060 Concrete Cleaner/Degreaser

Cleaner/degreaser combined with Migratory Corrosion Inhibitors to protect, clean and degrease concrete structures.

Package: 5 gallon (19 liter) pails and 55 gallon (208 liter) drums.

## **VPCI® POWDER PRODUCTS** FOR LAY-UP

VpCI®-307/308/309 Powders



Vapor corrosion inhibiting powders for ferrous and many non-ferrous metals. Apply by dust, sprinkle or fog. Nitrite and chromate free.

•VpCI®-307

MIL I-22110C (Comm. Equiv,)

Package: 5 Ibs. (2.27 kg), 50 Ibs. (22.7 kg), 100 Ibs. (45.4 kg)

· Used by global military personnel

#### VpCI®-609 Powder for Ferrous Metals

Powder for wet or dry lay-up of ferrous metals or aluminum.

Package: 5 pound (2.3 kg), 50 pound (23 kg) and 100 pound (45 kg) moisture barrier bags packed in fiber-lined drums.

• Used by global military personnel

#### RUBBER PROTECTION

#### Re-Grip MIL Rubber Revitalizer

Fast acting liquid cleans and revitalizes hardened and glazed rubber surfaces. Extremely effective in adding life and performance to all types of rubber, belts and for all types of items from heavy machinery to office equipment. May harm some plastics, test before use. Non-flammable.

Package: 1 gallon (3.96 liter) can, 5 gallon (19 liter) pails and 55 gallon (208 liter) drums.

# **VpCI® ENHANCED LUBRICANTS**

#### CorrLube Hydraulic fluid

Synthetic lubricating oil for automotive brakes, machine tools, pumps, bearings, etc. Provides excellent corrosion protection.

Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails, 55 gallon (208 liter) pails.

· Used by global military personnel

#### CorrLube Industrial Gear Oil

Synthetic lubricating oil, used for a wide range of opened and closed gear sets. Provides excellent corrosion protection.

Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails, 55 gallon (208 liter) pails.

#### CorrLube VpCI® Enhanced Lubricating Grease

Thixotropic grease with extreme pressure (EP) properties formulated for corrosion protection of metals exposed to severe environments.

Package: 14.5 oz. (.43 liter) cartridges, 5 gallon (19 liter), 55 gallon (208 liter) drums.

· Used by global military personnel

#### CorrLube VpCI® Motor Oils

Automotive engine oils with VpCI® protection. Grade SAE 10W-30 and 15W-40. API certified.

Package: 1 quart (.94 liter), 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

• Used by global military personnel

# **V<sub>P</sub>CI<sup>®</sup> ECO PRODUCTS**

EcoAir® VpCI®-324



Sprayable lubricant, non-flammable and contains no CFCs. H-1 rating and contains bacteriostatic preservative. Non-flammable.

Package: 10 oz. (284 g) cans, 12 per case.

EcoAir® VpCI®-337



Water-based fogger with a delayed release actuator. Can be enclosed in a container and left to dispense. Non-flammable.

Package: 13 oz. (369 g) cans, 12 per case.

EcoAir® VpCI®-377



Water-based rust preventative for temporary corrosion prevention.

Package: 12 oz. (340 g) cans, 12 per case. Non-flammable.

EcoAir® VpCI®-414



Water-based, biodegradable cleaner. Clings to ceilings and vertical surfaces in hard-to-reach areas. Non-flammable.

Package: 13 oz. (369 g) cans, 12 per case.

#### EcoClean® VpCI®-416

A non-toxic liquid to remove heavy hydrocarbons, grease and machinery oils. Package: Dozen 16 oz. (0.47 liter) bottles per carton, also available in kits.

EcoAir® VpCI®-423



Water-based, non-toxic rust remover. Offers multimetal protection while removing rust. Non-flammable.

Package: 14 oz. (397 g) cans, 12 per case.

EcoClean® VpCI®-423 Gree



Thixotropic liquid uses natural organics to remove rust, scale and oxides. Package: Dozen 16 oz. (0.47 liter) bottles per carton, also available in kits.

#### EcoClean® VpCI®-433

Removes graffiti, inks, paints from metal, concrete and wood.

Package: Dozen 16 oz. (0.47 liter) bottles per carton, also available in kits.

#### EcoClean® Silver and Gold Cleaner

VpCI® enhanced silver and gold polish for electrical contacts, jewelry and silverware. Package: 16 oz. (453 gram) jars, 6 per carton.

#### Eco-Corr® Film



Fully biodegradable (per ASTM D 5338), aliphatic polyester film, utilizing Cortec's patented VpCI® technology.

Package: Standard and custom roll stock.

#### Eco Film®



Fully biodegradable, aliphatic polyester film without corrosion protection. Package: Standard and custom roll stock.

#### EcoLine® All Purpose Lubricant



VpCI® lubricant based on soybean methyl esters and designed for industrial, shop and home use. It contains a friction modifier and extreme pressure additive. Provides excellent corrosion protection.

Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails,55 gallon (208 liter) drums, liquid totes and bulk.

#### EcoLine® Bearing, Chain and Roller Lube



This is a ready-to-use high quality rust preventative lubricant, formulated with American grown natural soya seed oil, which surpasses the lubricity performance levels of most conventional petroleum-based lubricants.

Package: 16 oz. (0.47 liter) bottles, 1 gallon (3.7 liter) pails, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

#### EcoLine® Cleaner/Degreaser



Heavy-duty, water-dilutable cleaner/degreaser for tough cleaning jobs in industrial and commercial applications based on soybean methyl esters. Provides temporary corrosion protection.

Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### EcoLine® Cutting Fluid



Multifunctional biodegradable concentrate based on soybean methyl esters for metal cutting operations. Provides excellent corrosion protection. Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### EcoLine® Food Machinery Lubricating Grease



This is a high-quality, corrosion inhibiting lubricant formulated with American-grown natural soya seed oil.

Package: 16oz (453.6g) tub, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

#### EcoLine® Heavy Duty Grease



Utilizing the latest biotechnology, this grease is an environmentally friendly replacement for traditional harmful greases.

Package: 14oz (396 g) cartridge, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

#### EcoLine® Rust Preventative



Biodegradable temporary coating based on soybean methyl esters, and designed for use in severe marine and high humidity outdoor and indoor environments. Provides excellent corrosion protection.

Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

#### EcoSpray® VpCI®-238

Protects electrical and electronic contacts and components.

Package: Dozen 16 oz. (0.47 liter) bottles per carton, also available in kits.

#### EcoSpray® VpCI®-325



Replaces oil with natural, biodegradable lubricants and corrosion inhibitors. Package: Dozen 16 oz. (0.47 liter) bottles per carton, also available in kits.

#### EcoSpray® VpCI®-389



Water-based coating to rust-proof iron, steel and aluminum. Package: Dozen 16 oz. (0.47 liter) bottles per carton, also available in kits.

#### EcoWeave® VpCI® Woven Polyethylene



Transparent VpCI<sup>®</sup> film designed for use in applications where additional strength and tear resistance are required. This product is recyclable. MIL PRF-121G(Comm. Equiv.)

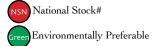
Package: Custom sizes.

• Used by global military personnel



Cortec<sup>®</sup> is committed to continued development of processes and products that are environmentally safe, recyclable, biobased, and biodegradable.





# MILITARY STANDARDS CROSS REFERENCE GUIDE

Product	Performance Guideline	QPL Listed	Commercial Equivalent**	NSN/NATO/GSA
Cor-Pak® 1-MUL Pouch	MIL I-22110C		Yes	NSN 6850-01-470-2737
				GSA 8030-01-208-1769
Cor-Pak® Tablets*	MIL I-22110C		V.	
CorShield® Packaging Fabric	MIL P-58102		Yes	
Desicorr® VpCI®	MIL-D-3464E(1) MIL-D-3464E(1)			
Desicorre vpcie	` '			
EcoShield <sup>®</sup>	MIL I-22110C		Yes	
EcoWeave®	MIL P-58102 MIL PRF-121G		Yes	
MilCorr® Shrink Film	MIL PRF-121G MIL PRF-121G		Yes	
VpCl®-101	WILL FRI -121G		165	NSN 6850-01-338-1392
VpCl®-105	MIL I-22110C		Yes	NSN 6850-01-406-2060
VpCl®-110*	MIL I-22110C		Yes	NSN 6850-01-456-2971
VpCl®-111	MIL I-22110C		Yes	NSN 6850-01-408-9025
VpCI®-125	WIIL I-221100			14014 0000 01 400 0020
VpCI-126 Blue®	MIL PRF-22019E(1)		Yes	
VpCI-126® Shrink	MIL PRF-22019E(1)	QPL 22019-21		
VpCI®-130 Series	MIL-PRF-26514G(T 3)(CLS II)(A)			
VpCI®-133	MIL-PRF-26514G(T 3(CLS II)(A)			NSN 6850-01-426-3539
VpCI®-144	MIL PRF-3420G		Yes	
VpCI®-146*	MIL PRF-3420G		Yes	
VpCI®-150/170	MIL-PRF-26514G(T 3)(CLS II)(A)			NSN 8030-01-208-1769
				NATO 8030-00-244-1299
ElectriCorr® VpCI®-238				NSN 6850-01-413-9361
VpCl®-307	MIL I-22110C			
VpCI®-308	MIL I-22110C			
VpCI®-322	MIL PRF-46002C		Yes	
VpCl®-323	MIL PRF-46002C		Yes	
V. O.	MIL I-85062 (Additives to Oils)		Yes	NON 0050 04 547 4050
VpCl®-325	MIL PRF-16173E (3)			NSN 6850-01-517-1652
VpCI®-326	MIL PRF-46002C		Yes	NSN 6850-01-470-3358
VpCI®-327	MIL I-85062 (Additives to Oil) MIL C-15074E		Yes Yes	NATO 6850-66-132-6100
VpCI®-329	MIL PRF-46002(1)		Yes	NSN 6850-01-470-3359
VPO1 020	MIL I-85062 (Additives to Oil)		Yes	NATO 6850-66-132-6100
VpCI®-347	WILL T GOODE (Additives to Oil)		103	NATO 6850-66-132-6101
				NATO 6850-66-132-6102
				NSN 6850-01-470-2740
VpCI®-368	MIL PRF-16173E (Grade 1)		Yes	NSN 8030-00-062-6950
•	,			NSN 8030-00-231-2345
				NSN 8030-00-244-1300
				NSN 8030-01-470-2601
				NATO 6850-66-132-5848
				NATO 6850-66-132-6099
VpCI®-368M	MIL PRF-16173E (Grade 1)	QPL 4620-1535(1)		NSN 8030-01-430-4898
VpCI®-369	MIL PRF-16173E (Grade 2)		Yes	NSN 8030-00-244-1297
				NSN 8030-00-244-1295
				NSN 8030-01-149-1731
VpCI®-369M	MIL PRF-16173E (Grade 2)	QPL 4620-1535(2)		NSN 8030-00-244-1298
V. O. 0.70				NSN 8030-01-149-1731
VpCI®-373				NSN 8010-01-470-2739
VpCl®-377				NSN 8010-01-502-9727
VpCl®-379				NSN 8030-01-481-8928
VpCl®-386 Water Based Acrylic VpCl®-388				NSN 8030-01-481-8897 NSN 8030-01-481-8898
VpCI®-415	MIL PRF-87937D Type IV	QPL AFPET/PTPT 09-004	1	NSN 6030-01-461-6696
vpoi -413			4	
VpCI®-422	, 1110 10200	. onding		NSN 6850-01-482-4534
				NSN 6850-01-482-4536
				NSN 6850-01-477-4155
	MIL-I-22110C	Yes		NSN 6850-01-470-2738
VpCI®-422 VpCI®-423 VpCI®-426 Rust Remover VpCI®-560***Powder	BOEING D6-17487 Rev P Douglas CSD-1 AMS-1526B  MIL-I-22110C	Pending Pending Pending Yes		NSN 6850 NSN 6850

<sup>\*</sup>ARDEC Technical Report 99-05, Picatinny Arsenal, New Jersey, USA.

<sup>\*\*</sup>Commercial Equivalent indicates that although the product has not been officially qualified, Cortec believes the product will meet the performance requirements of the referenced specification

<sup>\*\*\*</sup>Powder requires special production



# ASSET PRESERVATION SYSTEM FOR THE MILITARY



Visit our website for more information on Cortec® Vapor phase Corrosion Inhibitors

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 claims of the stamp of the customer must notify Cortec® Corporation of the claims warranty was 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

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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 www.CortecVCI.com

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