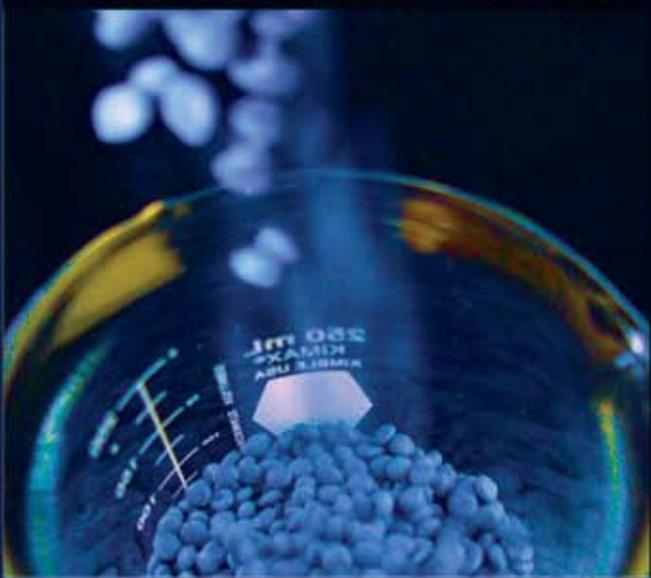




# CORTEC CORPORATION



Total Corrosion Control™



environmentally safe VpCl™/MCI® technologies



## 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.

### Short- and long-term protection.

There's a Cortec® solution whether you need temporary protection during in-plant processing, medium-term protection for shipment and storage or extended protection for lay-up, mothballing and field service.

### For a variety of environmental conditions.

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

### Protected parts are immediately ready for use.

The protective invisible layer deposited by Cortec® Vapor phase Corrosion Inhibitors (VpCIs) 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.

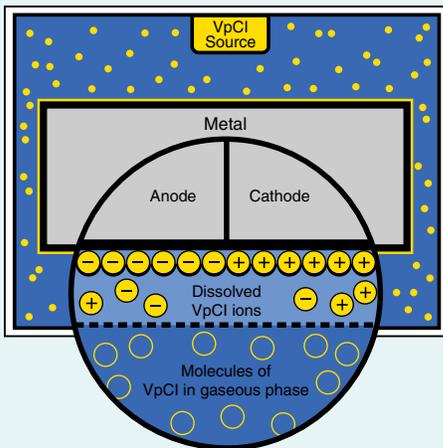
In the majority of cases, the invisible protective ionic layer of Cortec® VpCIs does not alter important surface properties. This is true even for most precision electronic devices where conductivity, permittivity and dimensional tolerances are crucial.

### For tiny electronic devices to tanker holds.

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

## How Cortec® VpCIs Work.

### Ionic Action of VpCI Creates a Molecular, Inhibiting Layer.



#### VpCI:

- ▶ Vaporizes.
- ▶ Conditions enclosed atmosphere with a protective vapor.
- ▶ Vapor migrates to all recessed areas and cavities.
- ▶ Vapor condenses on all metal surfaces.
- ▶ Ions dissolve in moisture layer (water electrolyte).
- ▶ Protective ions are attracted to metal surfaces.
- ▶ Ions form a thin, monomolecular protective layer at the metal surface.

- ▶ Protective layer re-heals and self-replenishes through further condensation of the vapor. VpCI combines with other functional properties:
  - ▶ Antistatic
  - ▶ Cleaning
  - ▶ Desiccant Coatings
  - ▶ Fire Retarding
  - ▶ Lubricating
  - ▶ Paint Removing
  - ▶ Polymeric
  - ▶ Rust Removing

## More Efficient

### Delivery Systems.

- ▶ Add
- ▶ Attach
- ▶ Automatic dispense
- ▶ Brush
- ▶ Dip
- ▶ Disperse
- ▶ Electrostatic spray
- ▶ Fog
- ▶ Inject
- ▶ Insert
- ▶ Migrate
- ▶ Package
- ▶ Roll-on
- ▶ Wrap

These new delivery systems offer practical, economical breakthroughs 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 each type of delivery system. Whether liquid, powder, impregnated foam or plastic, VpCI formulation uses technology to

its best advantage for effective and economical corrosion protection.

The creative use of VpCI 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 heat exchanger in a few minutes and eliminate your shipping and storage corrosion problems.
2. Protect on-site, operational electrical circuitry for pennies a day.
3. Easily spray valve flanges and stems with an outdoor coating for extended protection.
4. Boost the protection of your lubricating oils with an additive effective for multimetal systems.

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

## How Cortec® VpCIs Cut Costs.

- ▶ Multifunctional products.
- ▶ More effective protection.
- ▶ Efficient delivery systems that make it economical to treat hard-to-protect items.
- ▶ Easy application.
- ▶ Improved health, safety and pollution control.
- ▶ Elimination of extra processing steps, as there is no need to remove VpCI protection.
- ▶ Extension of equipment life.

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, 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.





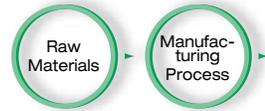
## Manufacturing .

During the manufacturing of your product, whether circuit boards or metal stampings, Cortec® products easily integrate into your 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 you produce first-quality products.

Cortec® corrosion inhibitors provide you with unique solutions to difficult corrosion problems. Use VpCI powders to protect difficult-to-reach voids. Water-

based inhibitors replace oily coatings and coolants, and provide easy-to-remove intermediate protection. Water soluble additives in hydro test solutions protect during and after draining. 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® provides corrosion protection from beginning to end.



Product Life Cycle With Cortec® VpCIs



Product Life Cycle Without Cortec® VpCIs

## 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, are non-toxic and recyclable.

**PAPERS:** Cortec® VpCI papers provide corrosion protection in several different applications including single item packaging, multiple item wrapping for bulk shipments, OEM and automotive parts packaging for storage and shipping, and sheet liners for product separation. The papers are nitrite free and made from neutral/natural kraft that are recyclable and repulable.



# Total Corrosion Control... from raw materials to final user.



**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, reinforced constructions. All films have excellent clarity. The multifunctional VpCI-125 incorporate Vapor phase Corrosion Inhibitors, desiccant and antistatic construction.

VpCI-126 Blue 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.

**FOAMS:** Cortec® impregnated foams and Cor-Pak™ bubbles protect precision machined parts and highly sensitive electronic components. They can protect items from breakage and surface damage or scratches.

Cortec® EcoShield® and CorShield® protect delicate items with its abrasive-proof lining and absorbs condensation as well.

**INSERTS:** Cortec® VpCI inserts provide exceptional absorption and will even reach recessed areas. Inserts fit into virtually any packaging system



## Preservation.

and come in pouches, tablets, foams and paper. When your customers use your product, they can rely on the same corrosion protection to lengthen the service life of your product. Cortec® VpCI systems protect electrical and electronic equipment during manufacturing, storage, shipping, 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 apply them instantly, quickly, and depending on the product without little or no surface preparation to your piping, tubes, tanks, motors and generators. 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.



## Process Industries.

The aggressive, corrosive attack of processing systems presents engineers with the greatest challenge in maintaining efficiency, while protecting the safety of workers and the environment.

Cortec's® corrosion inhibitors provide a new, pro-environmental set of answers. They offer an environmentally friendly method of treatment with low toxicity and low polluting effects.

As a company in the chemical industry, we believe in intelligent design and construction with a commitment to pro-environmental manufacturing

and practices. This commitment is reflected through Cortec's® certification under the ISO 14001 Environmental Standard.

Cortec® has developed additive technology that offers highly efficient and economical corrosion protection for process industries. While conventional corrosion inhibiting treatments provide liquid level inhibition, Cortec® VpCIs are highly mobile. Like a magnet, VpCIs are attracted to areas with potential for corrosion. They achieve protection in the interface, liquid phase and vapor phase.

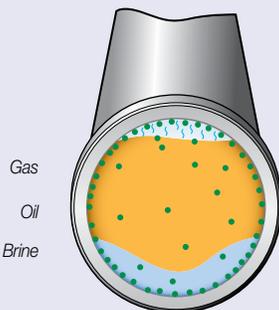
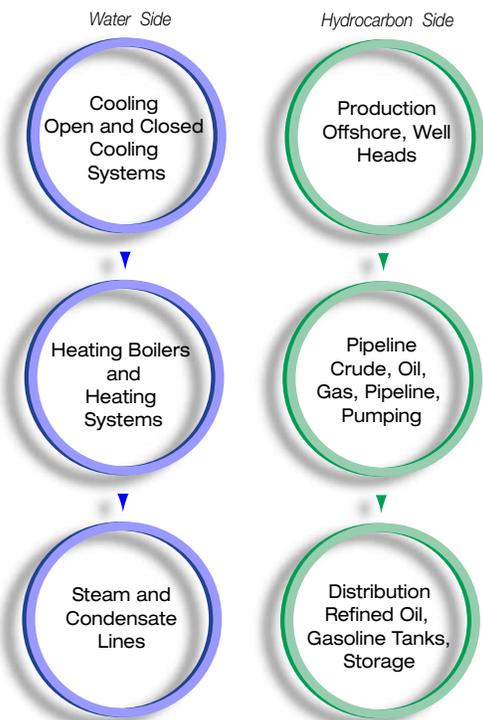
## Self-Replenishing.

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.

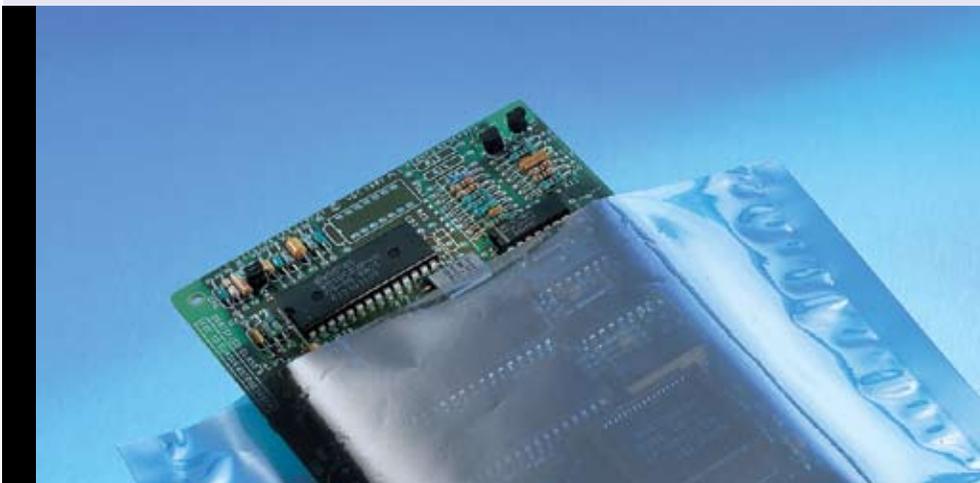
As a pro-environmental corrosion treatment of the 21st century, Cortec® VpCIs are free of chromates, other heavy metals, phosphates or chlorinated hydrocarbons. These new organic formulations give you an environmentally acceptable way to protect equipment. From aggressive brine solutions in deep and hot 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.



### Process Systems



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



## Concrete Structures.

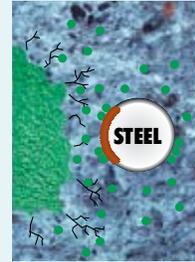
Migrating Corrosion Inhibitors™ (MCIs®), a technology developed by Cortec® researchers, rehabilitate concrete structures which deteriorate due to corrosion of the reinforcing steel. MCI® is added to the concrete mixture during construction of new structures and during the rehabilitation process of old 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 will neutralize the 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.

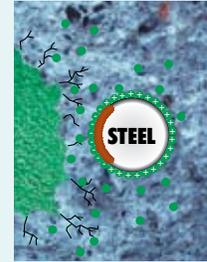
In addition to mixing with concrete at the job site or plant, use Cortec® MCIs® as a surface treatment or inject into the concrete structure.



*Remove spalled concrete from deteriorating structure.*



*MCI® migrates through concrete without direct application to steel.*



*MCI® protects steel from further corrosion.*





## Metal Treatments.

Cortec® Metal Treatments come in powder, liquid and gel form for dip, spray and brush-on applications. 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.

Cortec® pro-environmental products for metal treatments also include biodegradable cleaners and non-polluting paint stripper.

Often, before rust can be removed from a part, soil or paint must be removed first. A quick visual inspection usually determines if a part needs

preparatory work. Other times, especially with heavily rusted and encrusted parts, you must remove rust before you find a "layer" of soil or paint which will require removal.

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 many paints in three to 30 minutes.



*Remove oil, grease and soils*



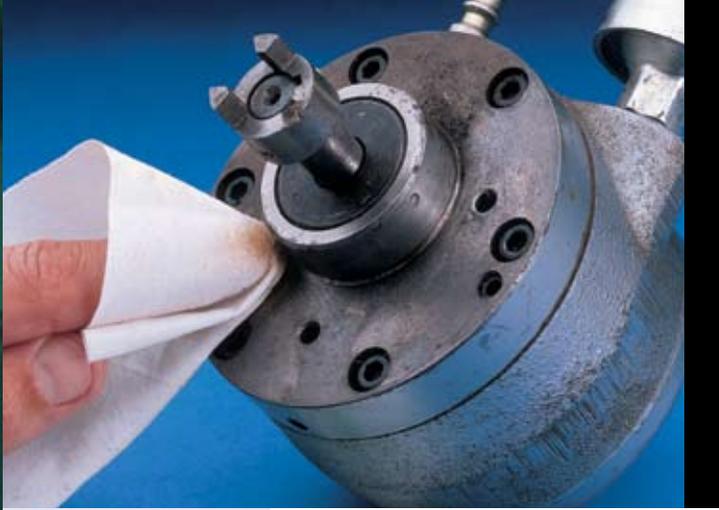
*Remove old paint*



*Remove rust*



*Apply Cortec® rust protection*



## New Delivery Systems.

The Cortec Corwipe® product is a revolutionary multi-purpose wipe that cleans oils, soil, greasers, and light rust and leaves temporary corrosion inhibitor protection. This wipe is environmentally safe, and can be used without gloves. Corwipe® eliminates the need for separate bottles of cleaners and has a fresh lemon scent.

## High Performance Coatings.

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

Cortec's® complex formulas of non-toxic, organic inhibitors offer protection far exceeding most paints, primers and solvent-based products. 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 applications.

When a Cortec® coating is used as a primer only, you may apply most topcoats with no loss of VpCI or barrier protection capability. Most Cortec 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.



# Eco Products

## EcoAir™

We are proud to introduce a major step forward in aerosol technology: **EcoAir™** Air-Powered Aerosol products. For the first time in the industry, we are providing aerosol



products that are powered by compressed air rather than traditional chemical propellants. This technology is innovative because product is filled into a four-layer Mylar **EcoPouch™** inside the can, which is pressurized. As the valve is depressed, the surrounding pressure expels the bag's contents. 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
- ▶ Unique water-based products for the toughest maintenance application.



EcoPouch™

### Safe for the environment

**EcoAir™** products do not contain propellants, CFCs or HCFCs that affect the atmosphere, ozone layer or the environment. **EcoAir™** products are formulated with ingredients rated for their biodegradability and non-polluting characteristics, while minimizing waste disposal.

### Safe for the user

**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 products do not contain 1,1,1 trichloroethane, methylene chloride or chlorinated solvents.

### Safe for storage

**EcoAir™** products do not have storage or added fire insurance restrictions. They can be stored like any non-aerosol lubricant or cleaner. Store at room temperature like many water based products, do not allow them to freeze.

### Safe for shipping

**EcoAir™** products can be shipped by air freight or any other conventional shipping method.





## 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.



## Biodegradable Films

### Eco-Corr® & EcoFilm™

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

## EcoSpray® & EcoClean®

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





## Corrosion Inhibiting Additives for Coatings, Fluids, Adhesives and Plastics.

Cortec's® custom VpCl corrosion inhibiting additives offer a new world of production and marketing possibilities. Our additive technology allows you to economically add VpCl corrosion inhibiting properties to your coatings, water treatment formulations, plastics, elastomers, adhesives, working fluids, etc.

Cortec® VpCl additives are a sound business investment. Because they increase the protective capability of your products, VpCls add significant value to what you can offer current customers — and essential credibility for new markets you want to reach.

Cortec® VpCls protect continuously and are self-replenishing for uninterrupted protection in contact and vapor phase. Because they do not contain chromates or other heavy metals, nitrites or chlorinated hydrocarbons, VpCls are safe for your staff, your customers and the environment.

With Cortec® VpCl additives, you can eliminate the need for expensive alloys, platings or stainless steel and other corrosion resistant metals and materials.

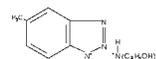
Some current customers already use additives for stretch and polyethylene films, antistatic bags, corrugated plastic containers, injection molded parts, coatings, adhesives, sealants, polymers, plastics, inks, lubricants, fuels, concrete, etc. The formulation applications are almost endless.

Most elastomers are, at best, inert in relation to metals, and often accelerate the corrosion of metals in contact. With Cortec's® revolutionary VpCl technology, standard elastomers are easily and economically transformed into safe, constant and thorough protection for any metal or alloy. Cortec® VpCl additives are suitable for liquid polymeric systems such as paint coatings, emulsions and inks, extrusion grade polymers, elastomers, injection molded plastics, etc.



## Generic Additives.

Cortec® augments its proprietary line of VpCl products with a complete line of high quality, industrial grade corrosion inhibiting compounds. Our inventory covers a broad range of outstanding organics that are manufactured using the highest possible standards, including ISO 9001 and ISO 14001.



**Tolytriazole, Amine Salt:**  
Corrosion inhibitor for the protection of copper, brass, bronze and ferrous metals. Viscous liquid. Oil soluble.  
Cas. No: 29385-43-1 + 102-71-6  
TSCA



Protection Guide	Metals								
	Carbon Steel	Stainless Steel	Cast Iron	Aluminum Alloys	Galvanized Steel	Brass (<30%Zn)	Copper	Solder	Epoxy Coated Steel
VpCI-101	1	1	1	1	1	1	1	1	NA
VpCI-105/111	1	1	1	1	1	1	1	1	NA
VpCI-110	1	1	1	1	1	1	1	1	NA
VpCI-150 & 170	1	1	1	1	1	1	1	1	NA
Corrosorber®	1	1	1	1	1	1	1	1	NA
ElectriCorr® VpCI-238	2	2	2	2	2	2	2	2	NA
ElectriCorr® VpCI-239	3	3	3	3	3	3	3	3	NA
ElectriCorr® VpCI-248	2	2	2	2	2	2	2	2	NA
ElectriCorr® VpCI-286	2	2	2	2	2	2	2	2	NA
M-529	✓	✓	✓	✓	✓	✓	✓	✓	NA
VpCI-658	3	3	3	3	3	3	3	3	NA
VpCI-629 Bio	5	5	5	5	5	5	5	5	NA
VpCI-629	5	5	5	5	5	5	5	5	NA
VpCI-629D/HF/SC	5	5	5	5	5	5	5	5	NA
VpCI-637	5	5	5	5	5	5	5	5	NA
VpCI-638	✓	✓	NA	NA	✓	NA	NA	NA	NA
VpCI-639	5	5	5	5	5	5	5	5	NA
VpCI-705	5	5	5	5	5	5	5	5	NA
VpCI-812/819	3	3	3	3	3	3	3	3	NA
VpCI-1238	2	2	2	2	2	2	2	2	NA
VpCI-Coolant/Antifreeze	✓	✓	✓	✓	✓	✓	✓	✓	NA
S-20	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-25	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-41	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-42	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-49	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-69G	✓	✓	✓	✓	✓	✓	✓	✓	NA
S-69P	✓	✓	✓	✓	✓	✓	✓	✓	NA
G-6 Corrosion Inhibitor	NA	NA	NA	NA	NA	✓	✓	✓	NA
G-29 Corrosion Inhibitor	NA	NA	NA	NA	NA	✓	✓	✓	NA
VpCI-316	2	2	2	2	2	2	2	2	NA
VpCI-322	3	3	3	3	3	3	3	3	NA
VpCI-323	3	3	3	3	3	3	3	3	NA
VpCI-324	3	3	3	3	3	3	3	3	NA
VpCI-325	3	3	3	3	3	3	3	3	NA
VpCI-326	3	3	3	3	3	3	3	3	NA
VpCI-327	3	3	3	3	3	3	3	3	NA
VpCI-329	3	3	3	3	3	3	3	3	NA
VpCI-337	2	2	2	2	2	2	2	2	NA
VpCI-338	2	2	2	2	2	2	2	2	NA
VpCI-344	2	2	2	2	2	2	2	2	NA
VpCI-345	2	2	2	2	2	2	2	2	NA
VpCI-347	2	2	2	2	2	2	2	2	NA
VpCI-378	2	2	2	2	2	2	2	2	NA
VpCI-379	2	2	2	2	2	2	2	2	NA
VpCI-365	5	5	5	5	5	5	5	5	NA
VpCI-368	4	4	4	4	4	4	4	4	NA
VpCI-369	4	4	4	4	4	4	4	4	NA
VpCI-372	3	3	3	3	3	3	3	3	NA
VpCI-373	3	3	3	3	3	3	3	3	NA

Protection Guide	Metals								
	Carbon Steel	Stainless Steel	Cast Iron	Aluminum Alloys	Galvanized Steel	Brass (<30%Zn)	Copper	Solder	Epoxy Coated Steel
VpCI-374	4	4	4	4	4	4	4	4	NA
VpCI-377	2	2	2	2	2	2	2	2	NA
VpCI-383	4	4	4	4	4	4	4	4	NA
VpCI-385	4	4	4	4	4	4	4	4	NA
VpCI-386 Coating	4	4	4	4	4	4	4	4	NA
VpCI-386 Top Coat	4	4	4	4	4	4	4	4	NA
VpCI-386 Aluminum	4	4	4	4	4	4	4	4	NA
VpCI-387	4	4	4	4	4	4	4	4	NA
VpCI-388	4	4	4	4	4	4	4	4	✓
VpCI-389	4	4	4	4	4	4	4	4	✓
VpCI-390	4	4	4	4	4	4	4	4	✓
VpCI-391	4	4	4	4	4	4	4	4	✓
VpCI-393	5	5	5	5	5	NA	NA	NA	NA
VpCI-395	4	4	4	4	4	NA	NA	NA	NA
VpCI-396 Primer	4	4	4	4	4	NA	NA	NA	NA
VpCI-396 Conductive	4	4	4	4	4	NA	NA	NA	NA
VpCI-397	4	4	4	4	4	NA	NA	NA	NA
BioCorr Rust Preventive	2	2	2	2	2	2	2	2	NA
CorShield® VpCI Gold	4	4	4	4	4	NA	NA	NA	NA
CorShield® VpCI Strippable	3	3	3	3	3	NA	NA	NA	NA
CorrVerter®	4	4	4	NA	NA	NA	NA	NA	NA
M-109	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-110	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-112	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-118	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-119/M-119LV	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-121	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-124	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-126	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-138/M-138C	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-150	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-151	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-165	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-166	✓	✓	✓	✓	✓	NA	NA	NA	NA
M-168	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-235	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-236	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-238	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-240	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-370	✓	✓	✓	✓	✓	✓	✓	✓	NA
M-530	✓	✓	✓	✓	✓	✓	✓	✓	NA

### APPLICATION KEY

- 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 CAUTION Do Not Use With Indicated Metals**
- 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.
- ✓ Indicates the product is safe to use on specific metal. Consult Cortec for application information.

### CONSULTATION KEY

- Consult Cortec® For Specific Usage
- Recommended
- Not Recommended or Test Data Not Available



# Product Descriptions

Protection Guide	Metals								
	Carbon Steel	Stainless Steel	Cast Iron	Aluminum Alloys	Galvanized Steel	Brass (<50%/Zn)	Copper	Solder	Epoxy Coated Steel
MCI® Coating for Rebar	4	4	4	4	4	4	4	4	✓
MCI® Coating for Rebar NT	4	4	4	4	4	4	4	4	✓
MCI® EcoCure Curing Agent	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI® Grenade®	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI® Metric Grenade®	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI® Mini Grenade®	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI® Peel off Coating	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2000	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2001/2002	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2005 Gel	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2005 / MCI 2005NS	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2006 / MCI 2006NS	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2007	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2007P	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2008	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2010 / MCI 2011	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2019	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2020	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2020 M	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2020 P	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2020 v/o	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2020 v/oP	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2021	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2022	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2023	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2026 Concrete Primer	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2026 Floor Coating	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2026 Colorants	✓	✓	NA	NA	NA	NA	NA	NA	NA
MCI-2038	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2039	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2050	✓	✓	✓	✓	✓	✓	NA	NA	✓
MCI-2060	1	1	1	1	1	1	1	1	1
MCI-2070	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2311	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2701	✓	✓	✓	✓	✓	NA	NA	NA	✓
MCI-2702	✓	✓	✓	✓	✓	NA	NA	NA	✓
CorrLube® Lubricating Grease	2	2	2	2	2	2	2	2	NA
CorrLube™ Hydraulic fluid	2	2	2	2	2	2	2	2	NA
CorrLube™ Industrial Gear Oil	2	2	2	2	2	2	2	2	NA
CorrLube™ VpCI Motor Oils	2	2	2	2	2	2	2	2	NA
VpCI-307™	✓	✓	✓	✓	✓	✓	✓	✓	NA
VpCI-308™	✓	✓	✓	✓	✓	✓	✓	✓	NA
VpCI-309/309SF™	✓	✓	✓	✓	✓	✓	NA	NA	NA
VpCI-609®	✓	✓	✓	✓	✓	*	*	✓	NA
EcoFilm™ Film	NA	NA	NA	NA	NA	NA	NA	NA	NA
EcoWorks® Film	NA	NA	NA	NA	NA	NA	NA	NA	NA

### APPLICATION KEY

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**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.

✓ Indicates the product is safe to use on specific metal. Consult Cortec for application information.

\* **CAUTION** Do Not Use With Indicated Metals

### CONSULTATION KEY

✓ Recommended

□ Consult Cortec® For Specific Usage

□ Not Recommended or Test Data Not Available

## 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. Conforms to MIL PRF-81705D, NSN 6850-01-338-1392

**Package:** 50 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  
VpCI-111 NSN 6850-01-408-9025

**Package:** 20 per carton VpCI-105, and 10 per carton VpCI-111.

## 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" (64 mm) in diameter, and 2" (51 mm) high. Use one emitter per 10 cu. ft. (283 l) of enclosed space. VpCI-110 Conforms to MIL I-22110C, NSN 6850-01-456-2971

**Package:** 12 per carton.

## VpCI-125 Static Dissipative Film, Patented

Unique multifunctional films: VpCI/desiccant action and ESD protection. Transparent, multimetal protection, heat sealable. Protect against triboelectric charge generation and corrosion. Recyclable. Conforms to MIL-PRF-81705D, MIL-PRF-22010(A) and MIL-PRF-22020D.

**Package:** Standard and custom sizes.

## VpCI-125 Bio film

A polymer extruded film, that provides excellent corrosion inhibition, provides static decay and surface resistivity values that are in accordance with MIL-PRF-81705D. This film is also 100% biodegradable, with no composting required. Simply discard and once in a landfill conditions, will disappear within months.

**Package:** Custom sizes.

## VpCI-125 Clean Film

**Unique multifunctional films: 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.

## VpCI-126 Blue MultimetalLDPE Heat Sealable Film, Patented

**Unique dual action: VpCI/desiccant protection.** Transparent plastic films with VpCI for multimetal protection. Heat sealable. Also available in Zip-Lock® bags, and Shrink film varieties. Conforms to MIL-PRF-22019D and MIL-B-22020D. FDA approved and recyclable.

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

### COLOR KEY:

- VpCI Electronic Product
- VpCI Metalworking Products
- VpCI Packaging Products
- Surface Preparation Product
- VpCI Powders
- Water/Oil Additives
- VpCI High Performance Coatings
- VpCI Water Treatment Products
- Concrete/Construction Products
- 100% Biodegradable Packaging
- Generic Chemicals
- VpCI Additives for Coatings & Fluids
- VpCI ECO Products
- VpCI Enhanced Lubricants



### VpCI-126 Bio Film

Modeled after the best selling corrosion inhibiting film in the world, Cortec VpCI-126 film, VpCI-126 Bio is 100% biodegradable and does not sacrifice any of the properties that made its predecessor, VpCI-126, such a popular product. Also, no composting required, once exposed to landfill conditions, will disappear within months.

**Package:** Custom sizes.

### VpCI-129 HDPE Film

High-density polyethylene (HDPE) film extruded with Vapor phase Corrosion Inhibitors (VpCIs). Has high barrier properties. 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: VpCI/desiccant protection/ static dissipative.**

VpCI-131, 132, 133, 134, 137 are impregnated foams for ferrous and non-ferrous protection. Available in a variety of sizes. Nitrite free, non-toxic. Meets MIL-PRF-81705D for ESD properties, and MIL-I-22110B for vapor corrosion inhibiting. VpCI-133 NSN 6950-01-426-3539.

**Package:** Standard and custom sizes available.

### VpCI-144 Paper

Multimetal VpCI barrier coated paper. Excellent moisture barrier. Replaces polyethylene coated papers, recyclable, repulpable, non-toxic and biodegradable. Meets MIL-PRF-3420G.

**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 chromate free. Fully recyclable. Meets MIL-PRF-3420G.

**Package:** Standard and custom size roll stock and sheeting.

### VpCI-148 Grease Resistant Paper

VpCI paper designed for packaging of parts covered with grease or oil. Meets MIL-PRF-3420G.

**Package:** Available in standard and custom size roll stock and sheeting.

### VpCI-150 & 170 Adhesive Backed Foam Tapes, Patented

**Unique dual action: VpCI/desiccant 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

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

### VmCI-307™ Powder

Vapor corrosion inhibiting powders for ferrous and many non-ferrous metals. Apply by dust, sprinkle or fog. Nitrite and chromate free. VmCI-307 meets MIL I-22110C.

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

### VpCI-308 Powder

Vapor phase Corrosion Inhibiting powder for multi-metal applications. Apply by dust, sprinkle or fog. Nitrite, phosphate and chromate free.

**Package:** 5 lbs (2.27 kg), 50 lbs (22.7 kg), 100 lbs (45.4 kg)

### VpCI-309 Powder

Vapor phase Corrosion Inhibiting powder for ferrous metals. Apply by dust, sprinkle or fog. Nitrite and chromate free.

**Package:** 5 lbs (2.27 kg), 50 lbs (22.7 kg), 100 lbs (45.4 kg)

### VpCI-316Liquid 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-322Oil-Based Concentrate

Concentrate for use as an additive to various hydraulic lubricating systems that is suitable for both operating and lay-up applications. May also be fogged into internal cavities for corrosion protection. Also available in SP version. Will pass through one micron filter.

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

### VpCI-323Oil-Based Concentrate

Oil-based concentrate for use as an additive in oil-based and 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).

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

### VpCI-324Lubricating 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<sup>®</sup> 10 oz. (283 gram) cans.

### VpCI-325Lubricant/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.

**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. Also available in CorrLube<sup>®</sup> 11oz (312 grams) aerosol cans and EcoSpray<sup>®</sup> 16oz (454 grams) spray bottles.

### VpCI-326Oil-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. Conforms to MIL 46002C(1) and MIL I-85062 (Additives to oils).

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

### 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. Conforms to MIL C-15074.

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

### VpCI-329Oil-Based Concentrate

Oil-based concentrate for use in gear boxes, crank cases and other oil-base 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), and FDA approved (VpCI-329F) versions. Conforms to MIL PRF-46002C(1) and MIL I-85062 (AS) NATO 6850-66-132-6100, NSN 6850-01470-3359.

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

### 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<sup>®</sup> 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. FDA approved for indirect contact with food. 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. MIL PRF-16173E (Grades 1 and 2) NATO 6850-66-132-6101 and NATO 6850-66-132-6102.

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

### VpCI-350 AHS

Coating for the paper, folding box and corrugated box industry. Multi-metal VpCI produces a thin, non-penetrating coating for paper, chipboard and cardboard.

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

### VpCI-350/351 Coating Solution

Multimetal Vapor phase Corrosion Inhibitor coating for flexible packaging substrates such as kraft papers and corrugated boxes. Available in a solvent-based or water-based formulation.

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

### VpCI-355 EcoCoat™

Waterproof moisture barrier coating that is recyclable and repulpable. Replaces wax and polyethylene coatings for paper and corrugated packaging.

**Package:** 5 gallons (19 liter) and 55 gallons (208 liter).

#### COLOR KEY:

VpCI Electronic Product	VpCI Metalworking Products	VpCI Packaging Products	Surface Preparation Product	VpCI Powders
Water/Oil Additives	VpCI High Performance Coatings	VpCI Water Treatment Products	Concrete/Construction Products	100% Biodegradable Packaging
Generic Chemicals	VpCI Additives for Coatings & Fluids	VpCI ECO Products	VpCI Enhanced Lubricants	

### VpCI-357 Liquid Coating

Liquid saturation coating for flexible substrates such as paper, corrugated, chipboard, foam, Tyvek®, etc. Provides multimetal protection. Substrates coated with VpCI-357, in most instances.

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



### 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. Meets MIL PRF-16173E (Grade 1) (QPL product), NATO 6850-66-132-5848, NATO 6850-66-132-6099

**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. Also available in aerosol form CorShield® 368 12 oz. (0.35 L) cans.

### 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. Meets MIL PRF-16173E (Grades 1, 2 & 4) (QPL product), NSN 8030-00-244-1298

**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.

### VpCI-372 Strippable Coating

Water-based liquid applied coating that dries to a tack free, rubbery surface. Provides protection from both atmospheric corrosion and surface damage during storage and shipping. To remove, simply peel from the surface.

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

### VpCI-373 Wash Primer

Water-based, fast drying surface treatment product designed as a replacement for phosphate, and chromate treatments. Conforms to MIL P-15328D when used as a bonding primer.

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

### VpCI-374 Water-Based Acrylic Primer

Water-based, acrylic primer that provides extremely good corrosion protection in nearly all environments. Based on a hydrophobic latex that has extremely good salt resistance. Can be topcoated with many water-based and solvent-based finish coats.

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

### 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. Can apply over with most coatings, no need to remove.

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

### 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. Can apply over with most coatings, no need to remove.

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

### 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-385 Non-Skid Coating

Non-skid, water-based coating for application to a variety of critical surfaces. Environmentally friendly, long lasting coating that is UV stable and can be used on metal, plastic and concrete.

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

### 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 an excellent UV properties finish coat. Available in standard and custom colors and as a clear coat.

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

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

This is a fire retardant version of VpCI-386. Use Cortec's VpCI-374 as a primer. Passes ASTM D-3806-79 Fire Retardant Paint Test (2 ft Tunnel Method). Contains VpCI for optimal outdoor performance.

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

### VpCI-386 Aluminum

Water-based primer/topcoat, that provides protection to 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.

### 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.

### 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.

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

### 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.

### VpCI-390 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 VpCI-389. Custom colors available.

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

### VpCI-391 Non-tacky Temporary Coating

Water-borne temporary coating that is intended for medium to long-term indoor and outdoor protection. Can be easily removed with hot water or alkaline cleaner. Available in different colors.

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

### VpCI-393 Thin Film Epoxy

A thin film, two-component epoxy for use on bare and lightly rusted steel. Can be used in critical areas such as over rivets, weld seams and crevices. Slow curing, zero VOC clear coating that penetrates, seals and prevents further corrosion.

**Package:** 4 gallon (15.2 liter) kits.

### 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-396 Conductive

High solids moisture cure urethane containing conductive pigment. Provides consistent conductivity and excellent anticorrosion protection.

**Package:** 5 gallon (19 liter) pails.

### VpCI-397 High Temperature Coating

High temperature silicone coating that will protect metal substrates to 1100°F (600°C). Combines the advantages of a silicone high temperature coating with VpCI technology.

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

#### COLOR KEY:

VpCI Electronic Product	VpCI Metalworking Products	VpCI Packaging Products	Surface Preparation Product	VpCI Powders
Water/Oil Additives	VpCI High Performance Coatings	VpCI Water Treatment Products	Concrete/Construction Products	100% Biodegradable Packaging
Generic Chemicals	VpCI Additives for Coatings & Fluids	VpCI ECO Products	VpCI Enhanced Lubricants	

### VpCI-398 Epoxy Powder Coating Primer

Epoxy primer that is environmentally friendly. Combines the typical advantages of powder coatings, with VpCI corrosion protection. Designed as a primer for VpCI-399.

**Package:** 44 lb. (20 kg) containers.

### VpCI-399 Epoxy-Polyester Hybrid Powder

Epoxy-polyester hybrid powder coating that is environmentally friendly. Leaves a hard, flexible finish that is UV stable. Available in standard and custom colors.

**Package:** 44 lb. (20 kg) containers.

### VpCI-405 Cleaner/Degreaser

Heavy duty cleaner and degreaser designed for cleaning in industrial applications. Excellent for removing carbon build-up, greases, dirt and other contaminants. Provides temporary multi-metal corrosion protection.

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

### 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. Also available as CorrClean™ 11 oz (312 grams) aerosol cans.

### 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

### VpCI-415 Cleaner/Degreaser

Heavy-duty, biodegradable alkaline cleaner/degreaser for use in aircraft applications. Excellent for removing oils, greases, dirt and carbon build-up. Provides multi-metal short term corrosion protection after cleaning. Conforms to MIL PRF-87937D Pending QPL#.

**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. Also available as CorrClean™ 18 oz (510 grams) aerosol cans

### 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. Also available in EcoSpray® 16 oz (454 grams) spray bottles.

### 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. Provides short-term, multi-metal corrosion protection after cleaning.

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

### VpCI-418/418L/418LM

Heavy-duty alkaline cleaner and degreaser for use in industrial cleaning equipment. Non-foaming cleaner that provides short term 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 totes and bulk. Also available as Safe-T-Charges 5 lb (2.3 kg) water soluble bags and in 418LM (sodium free version).

### VpCI-419 Cleaner/Degreaser Concentrate

Heavy-duty cleaner and degreaser concentrate developed for cleaning industrial, oil field, 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.

### VpCI-422/423 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. VpCI-423 is a gel 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. Also available in EcoClean®-423, 16 oz. (455 gram) pump spray bottle and EcoAir® VpCI-423 16 oz. (455 gram) cans.

### VpCI-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-426/426 Gel/426 Powder 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. Available in gel and powder form.

**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. 50 lb (23 kg) boxes and 100 pound (45 kg) drums. Safe-T-Charges 5 lb (2.3 kg) water soluble bags.

### VpCI-427 Aluminum Cleaner

Water-based, liquid concentrate that dissolves oxides/scale from aluminum.

**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 urethane. 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. Also available in EcoClean™ 16 oz (455 gram) spray bottles.

### VpCI-605/605L/605NS 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-609® Powder

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.

### VpCI-611

Additive for hydro treating, wet blasting and flash rust prevention for ferrous metals.

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

### 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-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.

### VpCI-629 Bio Inhibitor for Crude Oil, Gas and Petrochemical Processing, Patent Pending

The only product in the market of oil field inhibitors which combines a high level of corrosion protection, biodegradability and low toxicity.

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

### 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.

#### COLOR KEY:

VpCI Electronic Product	VpCI Metalworking Products	VpCI Packaging Products	Surface Preparation Product	VpCI Powders
Water/Oil Additives	VpCI High Performance Coatings	VpCI Water Treatment Products	Concrete/Construction Products	100% Biodegradable Packaging
Generic Chemicals	VpCI Additives for Coatings & Fluids	VpCI ECO Products	VpCI Enhanced Lubricants	

### 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 non-ferrous 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.

### 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.

### VpCI-705 Fuel Additive

Corrosion preventive additive for gasoline, diesel, gasoline mixtures and alcohol fuels that also works as fuel stabilizer and water emulsifier. Soluble in 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-812 Wax Paste

Long lasting, high shine wax and rust blocker containing new, high performance VCI's. Protects against UV rays and fiberglass oxidation.

**Package:** 16 oz. (.47 liter) bottle, 5 quart (4.7 liter), 5 gallon (19 liter) pails.

### VpCI-819 Wax/Rinse

Wax/Rinse emulsion with corrosion inhibitors. Available as a concentrate or diluted. Protects against UV rays, oxidation and corrosion.

**Package:** 16 oz. (.47 liter) pump spray bottle, 5 quart (4.7 liter) and 5 gallon (19 liter) pails.

### VpCI-1238 Liquid Additive for Vapor Degreasing, Cleaning, and 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.

### VpCI-Coolant/Antifreeze

Corrosion inhibiting heat transfer fluid featuring a wide range of use temperatures from 60F (-50° C) to 280F (140°).

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

### GalvaCorr, Patent Pending

**Cathodic protection for concrete.**

This is a two component moisture curing zinc rich silicate coating for concrete.

### MCI® Anti-Graffiti Coating for Concrete

Two-component urethane-based coating is designed for easy removal of ink or paint graffiti applied to concrete.

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

### MCI® Architectural Coating

MCI® containing water-borne sealer/coating for all reinforced, pre-cast, pre-stressed, post-tensioned or marine concrete structures. Can be applied to concrete and/or direct to metal. Available in various colors.

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

### MCI® Coating for Rebar

MCI Coating for rebar is a water-based coating that provides excellent corrosion protection to rebar during storage and after embedment in concrete.

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

### MCI® Coating for Rebar NT

Non-tacky version of MCI Coating for Rebar.

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

### MCI® EcoCure Curing Agent, Patented

A surface applied soya-based curing agent/sealer, containing Migrating Corrosion Inhibitors (MCI®).

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

### MCI® Film

Black PE film designed for use in the construction industry as a vapor barrier. Provides multimetal corrosion and UV protection, and is 100% recyclable.

**Package:** 20' x 100' sheeting (6.10 m x 30.48 m).

### MCI® Grenade®

Migratory Corrosion Inhibitor™ powder packaged in water-soluble PVA bags. One grenade provides corrosion protection to one cubic yard (0.76 m<sup>3</sup>) of concrete.

**Package:** 20 - 1 lb (500 g) bags per box.

### MCI® Metric Grenade®

Migratory Corrosion Inhibitor™ powder packaged in water-soluble PVA bags. One metric grenade provides corrosion protection to one cubic meter (1.308 yd<sup>3</sup>) of concrete.

**Package:** 20 - 650 g (1.43 lb) bags per box.

### MCI® Mini Grenade®

Migratory Corrosion Inhibitor™ powder packaged in water-soluble PVA bags. One mini grenade provides corrosion protection to 0.5 cubic feet (0.015 m<sup>3</sup>) of concrete.

**Package:** 100- 0.02 lb (10 g) bags per box.

### MCI Peel Off Coating

Water based acrylic, peelable coating containing MCI molecules. Temporary coating for non-porous surfaces that can be peeled when dry to leave a clean, ready to use substrate.

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

### MCI-2000 Migrating Corrosion Inhibiting Admixture for Concrete, Patented

Used to prevent corrosion of rebar in concrete. Amino alcohol based inhibitor added to concrete mix. Conforms to ASTM G-109.

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

### MCI-2001/2002 Admixtures, Patented

MCI-2001 is a powdered form of MCI-2000. MCI-2002 is a slurry form of MCI-2000, with the added benefit of micro-silica. Both are amino alcohol based Migratory Corrosion Inhibitors and are concrete admixtures.

**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-2005 Migratory Inhibiting 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:** 13 oz. (0.38 liter) cartridges, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

### MCI-2005 Water-Based, Migrating, Corrosion Inhibiting Admixture for Concrete, Patented

Amine carboxylate, water-based admixture used to prevent corrosion of rebar in concrete. MCI 2005 can retard setting time of concrete by 3 to 4 hours at 70° F (21° C). Also available in a normal set (NS) version. Certified by Underwriter's Laboratories to meet NSF Standard 61 guidelines.

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

### MCI-2006 Powdered, Migrating, Corrosion Inhibiting Admixture for Concrete

Amine carboxylate, powdered admixture used to prevent corrosion of rebar in concrete. MCI 2006 can retard setting time of concrete by 3 to 4 hours at 70° F (21° C). Also available in a normal set (NS) version. Certified by Underwriter's Laboratories to meet NSF Standard 61 guidelines.

**Package:** 5 lb. (2.3 kg) boxes, 50 lb. (22.7 kg) and 100 lb. (45.4 kg) drums.

#### COLOR KEY:

VpCI Electronic Product	VpCI Metalworking Products	VpCI Packaging Products	Surface Preparation Product	VpCI Powders
Water/Oil Additives	VpCI High Performance Coatings	VpCI Water Treatment Products	Concrete/Construction Products	100% Biodegradable Packaging
Generic Chemicals	VpCI Additives for Coatings & Fluids	VpCI ECO Products	VpCI Enhanced Lubricants	

### ■ MCI-2007 SuperCorr®, Patented

Melamine based, water-reducing concrete admixture containing MCI® 2005 technology. MCI® 2007 increases the flowability of concrete, in addition to providing corrosion protection. Meets 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-2007P, Patent Pending

Polycarboxylate based, water-reducing concrete admixture containing MCI® 2006 technology. MCI® 2007P increases the flowability of concrete, in addition to providing corrosion protection.

**Package:** 50 lb. (22.7 kg) and 100 lb. (45.3 kg) drums.

### ■ MCI-2008 Via Corr™, Patent Pending

Polycarboxylate based, water-reducing concrete admixture containing MCI® 2006 technology. MCI® 2008 is designed for use in self-compacting and self-leveling concrete mix designs. MCI® 2008 increases the flowability of concrete, in addition to providing corrosion protection. Available in liquid and powder formulations.

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

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

Powder packed MCI® Emitters offering the ease of renewable protection.

**Package:** 20 per carton.

### ■ MCI-2019 Concrete Sealer, Patent Pending

40% solids, silane-based, low VOC concrete sealer with Migrating Corrosion Inhibitors for protection of concrete and embedded rebar.

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

### ■ MCI-2020 Migratory Corrosion Inhibitor for Existing Concrete Structures, Patent Pending

Amine carboxylate based surface treatment for existing concrete to prevent corrosion of embedded steel. Can also be used for injecting into cracks. Certified by Underwriter's Laboratories to meet NSF Standard 61 guidelines. MCI-2020V/O is a more viscous version available for vertical and overhead applications. Also available as a powder (MCI 2020 P or MCI 2020 V/O P), packaged so that one, 100 lb (45 kg) package makes one 55 gallon (208 liter) drum of ready to use material.

**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums. Powder package: 100 pound (45 kg) bags.

### ■ MCI-2021 Concrete Sealer, Patented

Silicate-based concrete sealer with Migrating Corrosion Inhibitors for protection of concrete and embedded rebar.

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

### ■ MCI-2022 Sealer, Patented

Water based, Silane-siloxane blend sealer. Penetrating, vapor-permeable, water-repelling sealer containing MCI molecules for protection of concrete, brick, masonry units, etc. and embedded reinforcement. MCI-2022V/O is a more viscous version available for vertical and overhead applications.

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

### ■ MCI-2023 Passivating Grout

Two-component, polymer modified, cementitious based coating for corrosion protection of exposed rebar and other steel structures. Contains MCI® molecules.

**Package:** Powder: 26.4 lb. (12 kg) buckets.  
Resin: 11 lb. (5 kg) pails.

### ■ MCI-2026 Flooring System

#### MCI-2026 Concrete Primer

Chemically resistant, Water-based, two component epoxy coating, which meets all of the USDA guidelines for use in poultry and meat plants. Clear coating can be tinted using any of the MCI 2026 Colorants.

**Package:** 0.75 gallon yield (2.86 liter), 6 gallon (22.7 liter) 3 gallon (11.4 liter) mixes, 15 gallon (56.8 liter) 5 gallon (19 liter) pails, 165 gallon (624.5 liter).

#### MCI-2026 Floor Coating

Chemically resistant, two component, 100% solids Novolac epoxy coating which meets all of the USDA guidelines for use in meat and poultry plants. Clear coating can be tinted using any of the MCI 2026 Colorants.

**Package:** 0.6 gallon yield (2.27 liter), 5 gallon yield (19 liter) 2.5 gallon (9.5 liter) mixes, 12.5 gallon (47.3 liter) 5 gallon (19 liter) pails, 138 gallon (522.3 liters).

#### MCI-2026 Colorants

Color additives for use in field for pigmentation of MCI 2026 primer and floor coatings. See MCI Colorant price sheet for colors and specific addition ratios.

**Package:** 4 - 1 quart (0.94 liter) cans per case.

### ■ 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 properties. 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.

### ■ MCI-2070 Additive to Asphaltic-based Primers

Water-based, concentrated migrating corrosion inhibitor admixture for asphaltic-based primer coatings.

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

### ■ MCI-2311 Concrete Repair Mortar

Single component, full depth repair mortar containing MCI 2006 NS technology.

**Package:** 50 lb. (23 kg) bags.

### ■ MCI-2701 Concrete Repair Mortar

Single component, trowel grade repair mortar containing MCI 2006 NS technology.

**Package:** 50 lb. (23 kg) bags.

### ■ MCI-2702 Concrete Repair Mortar

Single component, overhead repair mortar containing MCI 2006 NS technology.

**Package:** 50 lb. (23 kg) bags.

### ■ Boiler Lizard®, Patented

Vapor Corrosion Inhibitor (VpCI) powder in a polyvinyl alcohol (PVA) water-soluble bag designed for dry lay-up of boilers.

**Package:** Carton tubes (1 bag per tube).

### ■ BioClean 610

Coconut oil phospholipids-based product designed for the dispersion and preservation of microbiological growth in water-treatment applications.

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

### ■ BioCorr Rust Preventive

BioCorr RP is a ready-to-use, zero-VOC, water-based rust preventative that provides multi-metal protection while remaining environmentally preferable and biodegradable. BioCorr is ideally suited for aggressive indoor environments and mild outdoor environments offering up to 3-6 months outdoors or long-term (up to 2 years+) indoors..

**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, bulk, and 16 oz. (455 ml) cans.

### ■ Closed Loop Toad®, Patented

Vapor Phase Corrosion Inhibiting (VpCI) powders in polyvinyl-alcohol (PVA) water-soluble bags developed to provide corrosion protection in recirculating and operating cooling systems.

**Package:** Four 2.2 lb (1 kg) bags per box.

### ■ Cooling Loop Gator®, Patented

Vapor Phase Corrosion Inhibitor (VpCI) powder packaged in polyvinyl-alcohol (PVA) water-soluble bags developed for seasonal, short or long-term lay-up.

**Package:** Four 2.2 lb (1 kg) bags per box.

### ■ 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.

### ■ CorrLam™ VpCI Barrier Laminate

Heavy Duty Barrier-Foil/VpCI polyethylene laminated structure. Exceptional protection of moisture-sensitive and oxygen sensitive metal parts. Ideal for vacuum packaging.

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

### ■ CorLube® 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.

### ■ CorLube™ 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) drums.

### ■ CorLube™ 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.

#### COLOR KEY:

■ VpCI Electronic Product	■ VpCI Metalworking Products	■ VpCI Packaging Products	■ Surface Preparation Product	■ VpCI Powders
■ Water/Oil Additives	■ VpCI High Performance Coatings	■ VpCI Water Treatment Products	■ Concrete/Construction Products	■ 100% Biodegradable Packaging
■ Generic Chemicals	■ VpCI Additives for Coatings & Fluids	■ VpCI ECO Products	■ VpCI Enhanced Lubricants	

### ■ **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.



### ■ **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® VpCI Bubbles, Patented**

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 Bubble Bio Film**

Polymer extruded bubble film providing excellent corrosion inhibitor for up to two years. This product is also 100% biodegradable, no need to compost, once exposed to landfill conditions, will disappear within months.

**Package:** Available in custom size rolls.

### ■ **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. Conforms to MIL PRF-22019D, Type II

**Package:** Custom size roll stock.

### ■ **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® Cushioning Film**

VpCI high density film laminated onto a closed cell foam for cushioning protection. Excellent for protecting vulnerable parts from physical damage and corrosion.

**Package:** Custom sizes.

### ■ **Cor-Pak® Liner Board**

The premium corrosion inhibiting liner board in the industry. Provides multi-metal protection. Fully recyclable/repulpable.

**Package:** Custom sizes and constructions available upon request, in a 42 lb/1000 sq ft (205 g/m<sup>2</sup>) liner-board. Other basis weights are available.

### ■ **Cor-Pak® VpCI Fabric**

This product is a polyester non-woven fabric, impregnated with Vapor phase Corrosion Inhibitors and backed with a silicon release paper. Can be easily attached to the inside walls of most surfaces of packaging or shipping containers.

**Package:** Custom roll stock and sheeted.

### ■ **Cor-Pak® EX VpCI Film**

High density polyethylene film extruded with VpCI. Protects ferrous and non-ferrous metal. Excellent barrier. 1.25 mil (25-30 microns).

**Package:** Standard and custom size roll stock and 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 moisture resistance.

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

### ■ **Cor-Pak® VpCI Pipe Strip**

Low density, polyethylene strip containing VpCI 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® 1 MUL Breathable Pouches, Patented**

Tyvek® breathable membrane filled with multimetal VpCI (1-MUL). For applications where powder contamination is not acceptable. GSA 8030-01-208-1769

**Package:** 300 per carton.

### ■ **Cor-Pak® VpCI Skin Film, Patented**

Transparent skin film with VpCI for multimetal protection. Offers high clarity and optics. For industrial and retail packaging.

**Package:** Custom sizes.

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

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 hand wrap grades. FDA approved and recyclable.

**Package:** Standard and custom roll stock.

### ■ **Cor-Pak® VpCI Reinforced Paper**

Made from the highest quality, reinforced neutral natural kraft paper. This product offers excellent tear resistance, as well as providing corrosion inhibition to ferrous and nonferrous metals.

**Package:** Custom sizes and construction available.

### ■ **Cor-Pak® VpCI Polycoated Paper**

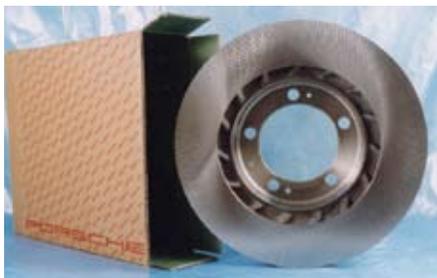
Made from the highest quality, neutral natural kraft paper. This product will provide excellent corrosion inhibition, to both ferrous and nonferrous metals, at the same time, being grease resistant with superb moisture barrier properties.

**Package:** Custom sizes and construction available.

### ■ **Cor-Pak® VpCI Tablets**

All purpose VpCI for multimetal applications. Insert into packages. Nitrite free, non-polluting, for non-ferrous and ferrous metals. Conforms to MIL I-22110C

**Package:** 1000 per bottle, 4 bottles per carton.



### ■ **Cor-Pak® VpCI Tunnel Shrink Film**

Specially designed thin gauge VpCI film for automated tunnel shrink film applications. Excellent corrosion protection for automated parts protection.

**Package:** Custom sizes.

### ■ **CorShield® VpCI Gold**

Brilliant true gold colored water-based coating. Excellent salt spray and humidity resistance. Prevents corrosion in the most harsh environment.

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

### ■ **CorShield® VpCI Strippable Coating**

Water-based, non-flammable temporary coating that can be easily removed without the use of paint strippers or cleaners. Available in different colors.

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

### ■ **CorShield® VpCI Packaging Fabric**

CorShield®, patented, is 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.

**Package:** Standard and custom sizes available.

### ■ **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.

### ■ **Corrosorber®**

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

**Package:** 10 capsules per carton.

### ■ **Corrosorber® VpCI Paper**

This paper is specifically designed for packaging and protection of precious metals such as silver, gold, brass, tin and copper.

**Package:** Available in standard and custom size roll stock and sheeting.

### ■ **CorVerter® VpCI Rust Converter and Primer**

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. (0.45l) jars, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums.

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

Multi-purpose wipe cleans while leaving behind a protective antistatic and VpCI film. Removes oil, grease and light rust. Based on strong Dupont's® Sontara® non-woven fabric. Wipe size 5" x 5" (127 x 127 mm).

**Package:** 25 wipes per package, 12 packages per carton.

### ■ **EcoAir® VpCI-324**

Sprayable lubricant, non-flammable and contains no CFCs. H-1 rating containing 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.

#### COLOR KEY:

■ VpCI Electronic Product	■ VpCI Metalworking Products	■ VpCI Packaging Products	■ Surface Preparation Product	■ VpCI Powders
■ Water/Oil Additives	■ VpCI High Performance Coatings	■ VpCI Water Treatment Products	■ Concrete/Construction Products	■ 100% Biodegradable Packaging
■ Generic Chemicals	■ VpCI Additives for Coatings & Fluids	■ VpCI ECO Products	■ VpCI Enhanced Lubricants	

### EcoAir® VpCI-377

Water-based rust preventative for temporary corrosion prevention. Non-flammable.

**Package:** 12 oz. (340 g) cans, 12 per case.

### 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.

### 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® Dispersant 600

Biodegradable dispersant for Petroleum spills. This product is recommended for use in sea water, contaminated with oils/petroleum-based product spills for dissipating thin petroleum films from the water surface.

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

### EcoClean® VpCI-416

A non-toxic biodegradable liquid to remove heavy hydrocarbons, grease and machinery oils.

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

### EcoClean® VpCI-423

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 and bags.



### Eco-Corr ESD

A polymer extruded film that offers the same ESD and corrosion inhibiting properties as VpCI-125 Bio, but is an alternative product. 100% biodegradable. A more elastic film, as compared to VpCI-125 Bio.

**Package:** Standard and custom roll stock and bags.

### EcoFilm™ Film

100% certified biodegradable/compostable per ASTM D6400. Non-VpCI product suited for all types of bag and packaging applications.

**Package:** Standard and custom roll stock and bags.

### 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

Ready to use high quality rust preventative lubricant, formulated with American grown natural seed oil, that surpasses the lubricity of most conventional lubes.

**Package:** 1 gallon (3.7 liter), 5 gallon (19 liter) plastic pails, 55 gallon (208 liter) drums, 16 oz (472 ml) spray bottles, totes and bulk.

### 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

High quality, corrosion inhibiting lubricant, formulated with American grown natural seed oil. Conforms to USDA H-I criteria and USFDA regulations: 21CFR 178.3570 'lubricants with incidental food contact'.

**Package:** 1 gallon (3.7 liter), 5 gallon (19 liter) plastic pails, 55 gallon (208 liter) drums, 16 oz (472 ml) spray bottles

### EcoLine® Heavy Duty Grease

Biodegradable grease, formulated with American grown natural seed oil. Provides a powerful combination of lubricating, moisture displacing and anticorrosion properties.

**Package:** 5 gallon (19 liter) plastic pails, 55 gallon (208 liter) drums, 16 oz (472 ml) cartridges.

### 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.

### EcoShield Paper and Linerboard

Made from the highest quality of recycled paper, EcoShield paper and linerboard, contains a barrier coating, that will reduce the moisture vapor transmission rating to levels similar to polycoated or waxed paper. Fully recyclable. Complies with FDA and USDA regulations for direct and indirect food contact.

**Package:** Custom sizes and construction available.

### EcoSpray® VpCI-238

Protects electrical and electronic contacts and components. 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.

**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 film designed for use in applications where additional strength and tear resistance are required. FDA approved and recyclable.

**Package:** Custom sizes.

### EcoWorks® Film

100% certified biodegradable/compostable per ASTM D6400 and many formulations are biobased. More rigid than EcoFilm.

**Package:** Custom sizes ad forms, bags and sheets.

### ElectriCorr® VpCI-238/239

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

**Package:** 9.45 oz (267.75 g) aerosol or EcoSpray® 238 pump spray, 16 oz. (0.47 liter), 5 gallon (19 liter) pails and 55 gallon (208 liter) drums.

### ElectriCorr® VpCI-248

Non-flammable, low VOC cleaner for electronic and electrical contacts and components, containing long lasting corrosion inhibitor. For use in enclosed environments.

**Package:** 12 oz (340 gram) aerosol cans, 6 cans per carton.

### ElectriCorr® VpCI-286

Non conductive 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.

### ElectriCorr® EnviroSafe Contact Cleaner

An alternative to the products based on HCFC-141B solvent. This product is non-flammable, non-conductive, doesn't leave any residue, fast evaporating and safe on most surfaces.

**Package:** 15 oz. (425 gram) aerosol cans.

### ElectriCorr® Universal Contact Cleaner

This product doesn't contain any HCFC's, is very safe on plastics, doesn't leave any residue, evaporates fast and is non-conductive. Removes light oils, grease and organic soils.

**Package:** 9 oz (255 gram) aerosol cans, 5 gallon (19 liters) pails and 55 gallon (208 liters) drums.

#### COLOR KEY:

 VpCI Electronic Product

 VpCI Metalworking Products

 VpCI Packaging Products

 Surface Preparation Product

 VpCI Powders

 Water/Oil Additives

 VpCI High Performance Coatings

 VpCI Water Treatment Products

 Concrete/Construction Products

 100% Biodegradable Packaging

 Generic Chemicals

 VpCI Additives for Coatings & Fluids

 VpCI ECO Products

 VpCI Enhanced Lubricants

### **G-6 Corrosion Inhibitor**

Corrosion inhibitor for the protection of copper, brass and silver. Benzotriazole (BTA). Designed for direct treatment, circulating cooling systems, functional fluids, wrapping tissue, corrosion protective coatings and cleaners.

**Package:** 100 pound (45.4 kg) drums.

### **G-29 Corrosion Inhibitor for Copper and Brass Alloys**

Corrosion inhibitor formulation for the protection of copper, brass, bronze and ferrous metals. Primarily designed for metalworking fluid formulations, and lubricating oils. 50% solution of tolyltriazole in alkanolamine.

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

### **M-109 Liquid Additive**

Multimetal Oil based corrosion inhibiting additive for use in solvent and some waterborne coatings. The usage level recommended is 1 to 3% by weight.

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

### **M-110 Liquid Additive**

Solvent based organic corrosion inhibitor that recommended for use in solvent based and some waterborne coatings. The usage level recommended is 1 to 3% by weight.

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

### **M-112 Liquid Additive**

Water-based additive to improve corrosion resistance in aqueous systems; coatings.

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

### **M-118 Liquid Additive**

Water-based additive to improve corrosion resistance in aqueous coating systems.

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

### **M-119/M-119LV Liquid Additive**

Water-based corrosion inhibiting additive for manufacture of water borne coatings. Provides contact and vapor phase corrosion inhibition for ferrous and non-ferrous metals.

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

### **M-121 Plastic Additive**

Masterbatch for extrusion of polypropylene film. PP extrusion grade resin base multimetal + desiccant formulation.

**Package:** Gaylord, 800 lbs. (364 kg).

### **M-124 Plastic Additive**

VpCI Masterbatch for injection-molded plastics.

**Package:** Gaylord, 800 lbs. (364 kg).

### **M-126**

Masterbatch for extruded films including LDPE, LLDPE, and HDPE, patented.

**Package:** Gaylord, 800 lbs. (364 kg).

### **M-138 Rubber Additive/M-138C**

Powder form additive for synthetic elastomers and natural rubber. 138C version with increased protection of cast iron and aluminum.

**Package:** 50 lb. and 100 lb. fiber drum (22.7 and 45.4 kg).

### **M-150 Ink Additive**

VpCI additive for inks. Solvent and water-based. Multimetal protection.

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

### **M-151**

Additive for Ink that provides a multimetal VpCI protection on paper or film backing material.

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

### **M-165 Coatings Additive**

VpCI additive for amine or poly amide components of epoxy coatings. Protection for ferrous and non-ferrous metals and alloys.

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

### **M-166 Coatings Additive**

VpCI additive for water-based liquid coating systems. Protection for ferrous, aluminum and galvanized metals.

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

### **M-168 Coatings Additive**

VpCI additive for oil/solvent based liquid coating systems. Protection for ferrous and non-ferrous metals.

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

### **M-235 Additive**

Corrosion inhibitor powder additive for copper, copper-based alloys and other yellow metals.

**Package:** 5 pound (2.3 kg), 50 pound (23 kg), 100 pound (45 kg) fiber drums and bulk.

### **M-236 Additive**

Liquid corrosion inhibitor especially for oils and solvent-based products. It provides corrosion inhibition for ferrous and non-ferrous metals, but is very effective for yellow metals.

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

### **M-238 Additive**

Solvent-based blend of contact and vapor phase inhibitors developed to provide multimetal protection during operating and idle conditions. M-238 is a very effective inhibitor when it is added to aromatic, paraffinic, naphthalenic, fluorocarbon and hydrocarbon-based compounds.

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

### **M-240 Additive**

Flash-rust corrosion inhibitor additive for water-based paints, additives, sealers, fluids, etc.

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

### **M-370 Water-Based Additive**

Multimetal corrosion preventive additive for water-based metalworking fluids, lubricants, cleaners and coatings during product manufacturing. Available in metal specific versions.

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

### **M-380**

Water-based corrosion inhibitor that is designed to be used with carboxylated acrylic or styrene-acrylic latices.

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

### **M-381**

Water-based corrosion inhibitor that is used most effectively with carbonated acrylic or styrene-acrylic latices. Combines the power of M-380, M-119LV, and a flash rust inhibitor. Doesn't contain any nitrates or ammonia.

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

### **M-415 Additive**

Vapor phase corrosion inhibitor additive for solvent and oil-based systems. Indirect food contact FDA approved product.

**Package:** 100 pound (45 kg) polyethylene lined drums.



### **M-435 Coatings Additive**

Water-based VpCI additive for aqueous coatings or compounds. Protects ferrous and non-ferrous metals. Prevents flash corrosion.

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

### **M-529 Additive for oils and lubricants**

Oil based corrosion inhibitor for lubricating oils for gasoline and diesel engines, hydraulic lubrication and other process system oils.

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

### **M-530 Additive for Hydraulic and gear oils**

Oil based corrosion inhibitor, containing ed-emulsifier for the use in hydraulic and gear oils.

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

### **M-640/640L Additive for Engine Coolants**

Corrosion inhibiting additive for water and ethylene glycol-based engine heat exchange fluids. Protects ferrous and non-ferrous metals. Passes GM automotive glassware test ASTM-D-1384.

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

### **M-645 Water/Oil Additive**

Corrosion inhibiting additive for saltwater applications. Especially effective in ballast tanks and offshore platforms containing seawater, and for hydrotesting.

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

### **M-5120 Coatings Additive for Skin Film and Blister Packaging, Patented**

Water-based additive for heat seal coatings. Protects ferrous and non-ferrous metals.

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

### **M-5365 Coating Additive**

Solvent-based additive for non-aqueous coatings or compounds. Protects ferrous and non-ferrous metals.

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

### **MilCorr™ VpCI Shrink Film, Patented**

Composite film, containing the ultimate additives package: Cortec multi-metal Vapor phase Corrosion Inhibitors (VpCI), flame retardant additives and UV (ultra violet) inhibitors. Film thickness 10 mils (250 microns).

**Package:** Available in sheeting and tube form.

### **S-5 Wetting Agent**

Wetting agent for aqueous and non-aqueous systems. Specially formulated for use in combination with Cortec® water soluble and oil soluble inhibiting systems.

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

#### COLOR KEY:

VpCI Electronic Product	VpCI Metalworking Products	VpCI Packaging Products	Surface Preparation Product	VpCI Powders
Water/Oil Additives	VpCI High Performance Coatings	VpCI Water Treatment Products	Concrete/Construction Products	100% Biodegradable Packaging
Generic Chemicals	VpCI Additives for Coatings & Fluids	VpCI ECO Products	VpCI Enhanced Lubricants	

### S-7 Oxygen Scavenger

Oxygen scavenger designed to protect boiler systems against oxygen corrosion (hydrazine-free).

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

### S-10 Condensate Corrosion Inhibitor/S-10F

Corrosion inhibitor for quench, process and condensate lines in boilers, and process systems. (F version is FDA approved).

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

### S-11 / S 11 Organic Additive

Additives for acid systems such as industrial cleaning solutions and hot pickling baths. Inhibits acid attack and metal loss.

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

### S-14 Antiscalant

General purpose water treatment antiscalant. Non-flammable and non-toxic.

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

### S-14 Bio Patent Pending

Biodegradable water treatment Building Block. It is a rare combination of powerful seal inhibition and excellent multi-metal corrosion protection.

**Package:** 5 lbs. (2.2 kg), 50 lbs. (22.7 kg), 100 lbs (45.4 kg).

### S-15 Boiler Treatment Additive

This product is a combination of oxygen scavenger and volatile neutralizing amines. The formulation is specifically designed for medium and high pressure boilers.

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

### S-16 Defoamer

Defoamer for aqueous and non-aqueous systems. Specially selected for use in combination with Cortec® water-based and oil-based inhibiting systems. Stable under both acidic and basic conditions. Silicone-free.

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

### S-20 Thinner

Water/solvent blend used to quickly reduce the viscosity of water-based coatings. Recommended for adjusting the viscosity of VpCI-376 and VpCI-386.

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



### S-25 Thinner

Solvent blend to be used in a number of Cortec® products to reduce application viscosity.

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

### S-41

Corrosion Inhibiting rinse additive for aqueous and non-aqueous systems formulated for use in combination with Cortec's existing water and solvent soluble cleaning systems.

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

### S-42 Activator/Accelerator Additive

S-42 is designed as an additive for used or new solutions of VpCI-422 to reactivate and accelerate their performance.

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

### S-49 Fuel Additive

Blend of solvents, dispersants, surfactants and emulsifiers for treatment of fuel oil grades #2, #4, #5 and #6.

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

### S-69 Water Treatment Additive

An all organic building block for water treatment formulations which contains a unique combination of contact and vapor phase inhibitors. Available in liquid or powder form.

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

### S-70

Economical, effective and environmentally friendly corrosion inhibitor liquid that provides excellent protection properties at very low concentrations. USDA approved as an additive for drinking water.

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

**Powder:** 5 lbs. (2.2 kg) box, 50 lb. (22.7 kg) and 100 lb. (45.3 kg) drums.

### S-111

Powder additive for aqueous alkaline cleaners that provides excellent flash corrosion protection at low concentrations for parts in-process.

**Package:** Available in 50 pound (23 kg), 100 pound (223 kg) and bulk.

### 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.

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

[CortecVpCI.com](http://CortecVpCI.com) and [CortecMCI.com](http://CortecMCI.com)

#### 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.

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