TOTAL CORROSION CONTROL
Environmentally Safe VpCI®/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 are available to protect ferrous and non-ferrous metals, including formulations that protect combinations of metals.

Short-term and long-term protection.
There’s a Cortec® solution for 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 corrosion from all aggressive atmospheres.

Protected parts are immediately ready for use.
The protective invisible layer deposited by Cortec® Vapor phase Corrosion Inhibitors (VpCI®) needs no removal. No degreasing, scraping, cleaning, or further preparation is necessary before processing, installation, or use. Your VpCI® protected components, parts, and finished assemblies are ready for immediate use. Cortec’s 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’s VpCl’s does not alter important surface properties. This is true even for the most precision electronic devices where conductivity, permittivity, and dimensional tolerances are crucial.

For tiny electronic devices to tanker holds.
Cortec’s VpCI®/MCI® technology protects any size products — from printed circuit board components during process, stored parts to large containerized shipments.

VpCl’s are compatible with many synergistic fluids, coatings, and technologies.
VpCI®/MCI® technology can be integrated into nearly every process.

How Cortec® VpCI® Works

• Vaporizes:
• Conditions enclosed atmosphere with a protective vapor.
• Vapor condenses on all metal surfaces.
• Ions dissolve in moisture layer (water electrolyte).
• Protective ions are attracted to metal surfaces.
• Ions form a thin molecular 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, Lubricating, Cleaning, Paint Removing, Desiccant, Polymeric, Coatings, Rust Removing, Fire Retarding.
More Efficient Delivery Systems

Cortec’s delivery systems offer practical, economical breakthroughs for the protection of metal parts and products, with innovative use of VpCI®/MCI® technologies.

Cortec® VpCI®/MCI® products are uniquely formulated for each type of delivery system. Whether liquid, powder, impregnated foam, or plastic, VpCI®/MCI® formulations use technology to its best advantage for effective and economical corrosion protection.

The creative use of VpCI®/MCI® technology offers improved protection even for conventional applications.

Add, Dip, Inject, Package, Attach, Dispense, Insert, Roll-on, Automatic dispense, Electronic spray, Migrate, Wrap, Brush, Fog

Multifunctional Products

From packaged products stored indoors to products located outdoors in adverse conditions, the new generation VpCI®/MCI® technology makes it more profitable to solve a corrosion problem than to ignore it.

For example, you can:

• Fog a heat exchanger in a few minutes and eliminate your shipping and storage corrosion problems.

• Protect on-site, operational electric circuitry for pennies a day.

• Easily spray valve flanges and stems with an outdoor coating for extended protection.

• Boost the protection of your lubricating oils with an additive effective for multimetal systems.

These four examples show how Cortec’s VpCI®/MCI® technology successfully solves problems caused by impractical conventional corrosion treatments.

How Cortec® VpCI®/MCI® Cuts Cost

Use Cortec® technology in each stage of the product’s lifecycle, starting from the production of metal stock to actual use in the field. When properly applied, Cortec’s VpCI®/MCI® technology substantially cuts time and cost throughout the entire product life cycle: manufacturing, storage, shipping, and field service.

Cortec’s VpCI®/MCI® products eliminate the extra processing steps such as cleaning, degreasing, rust removal, pickling, sandblasting, and reprotecting. You will have less re-work, fewer rejects, improved quality, reduced rust claims, and extended equipment life.

• 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: in most cases there is no need to remove the VpCI®/MCI® product.
• Extended equipment life.
Manufacturing

During the manufacturing of your product, Cortec® technologies easily integrate into your fabrication and assembly processes. While eliminating the corrosion of ferrous and non-ferrous metals, Cortec® products can provide lubrication, enhance production speed, and prolong tool life to help you produce first-quality products.

Cortec® VpCI®/MCI® technology provides you with unique solutions to difficult corrosion problems. Use VpCI®/MCI® powders to protect difficult-to-reach voids. Our water-based inhibitors replace oily coatings and coolants to provide corrosion protection. Our water-soluble additives in hydro test solutions protect during and after draining. VpCI®/MCI® emitters protect during the various stages of fabrication, assembly, shipping, and field operation.

Throughout the life of your product, Cortec® VpCI®/MCI® technology will provide corrosion protection from beginning to end.

Packaging

Cortec® offers a full range of VpCI® Packaging Solutions, some conform to international, government, military, and corporate specifications. VpCI® Packaging Solutions offer cost effective, high performance protection of parts, equipment, and structures for short or long-term, in environments from in-plant preservation to aggressive marine environments. VpCI® Packaging Solutions range from coated papers, impregnated foams, extruded films, cushions, emitter devices, inserts, and custom designed solutions; ensuring ease of integration, simplicity of use, and uncompromised performance.
**Papers:** Cortec® VpCl® 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 paper that is recyclable and repulpable.

**Films:** Cortec® VpCl® films will suit all your packaging needs. Films range from general use polyethylene film to shrink wrap, stretchable, or reinforced constructions. All films have excellent clarity. Multifunctional VpCl®-125 incorporates Vapor phase Corrosion Inhibitors (VpCl®), desiccant, and antistatic properties. VpCl-126® Blue bags and films provide multimetal corrosion protection for parts of all sizes. Corrlam® is a barrier protection film which maintains a vacuum and is excellent for high temperatures and humidity.

**Foams:** Cortec® impregnated foams protect precision machined parts and highly sensitive electronic components. They protect against breakage, surface damage, or scratches.

**Devices:** Cortec® devices provide exceptional adsorption and protection for recessed areas. Devices are applicable to virtually any packaging system. They come in pouches, tablets, foams, or emitters.

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**Preservation**

When you use Cortec® products, you can rely on our corrosion protection to prolong the service life of your products. Cortec® VpCl®/MCI® technology protects during manufacturing, storage, shipping, operation, and shutdown. Cortec® water-based or oil-based barrier coatings protect from atmospheric corrosion. Cortec® additives protect from corrosive environments and contaminants.

In cases where equipment or systems require layup, temporary shutdown, or long-term mothballing, Cortec® products can be applied quickly with little or no surface preparation (depending on the product). Cortec’s VpCl®/MCI® technology provides corrosion protection to external and internal metal surfaces and parts. The degree of protection needed is based on the severity of the environment and the length of exposure to corrosive elements. The protected system will be ready for immediate use when needed.
Process Industries

The aggressive corrosive attacks on processing systems present engineers with the greatest challenge to maintain efficiency, while protecting the safety of workers and the environment. Cortec’s VpCI® technology provides a new, pro-environmental set of answers. It offers environmentally friendly treatments with low toxicity and low polluting effects.

As a chemical company, we believe in intelligent design and commitment to pro-environmental manufacturing and practices. Our commitment is reflected with Cortec’s certification under the ISO 14001: 2008 Environmental Standard.

Cortec’s VpCI® additives offer highly efficient, pro-environmental, and economical corrosion protection for process industries. While conventional corrosion inhibiting treatments provide protection at the liquid phase only, Cortec® VpCI® technology provides corrosion protection in interface, liquid phase, and vapor phase.

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 and liquid distribution systems.

As the pro-environmental corrosion treatment of the 21st century, Cortec® VpCI® products are free of chromates, heavy metals, phosphates, or chlorinated hydrocarbons. Our organic formulations give an environmentally acceptable way to protect equipment. From aggressive brine solutions in deep and hot wells, to protecting miles of remote pipeline, Cortec’s VpCI® products extend the life of your systems.
Concrete Structures

Migrating Corrosion Inhibitor (MCI®) technology, developed by Cortec’s researchers, rehabilitates deteriorated concrete structures affected by corrosion on reinforcing steel. MCI® products can be added to concrete mixtures for new structures or during rehabilitation of old buildings. Concrete, mixed with MCI® products is poured and finished in the normal fashion. MCI® migrates through the concrete and seeks the embedded metal, attaching to it and forming a protective layer of MCls. The MCI® layer will mitigate the chemical reaction between chlorides and metal within the structure to prevent corrosion.

MCI® products are effective in fighting high chloride levels from de-icing salts applied to highways and bridges, airborne salts that attack marine structures, structures near sea water, and deterioration by acid rain and carbonation. MCI® technology also provides corrosion protection for tanks and pipes with thermal insulation.

In addition to adding MCI® into your concrete mix, Cortec® offers MCI® products for surface treatments or injection into existing concrete structures.

Migrating Corrosion Inhibitors

Stage 3: MCI® molecules continue to migrate by capillary, vapor phase action, and ionic action forming a tight MCI® layer on the surface.
Metal Treatment

Cortec® metal treatments come in powder, liquid coatings, and gel for many applications. Cortec® rust removers are based on organic chemicals that remove oxide and tarnish from many metals. These formulations replace harsh acids. When used as recommended, the rust removers are mild to human skin, most paints, plastics, woods, textiles, ceramics, and rubber.

Cortec® pro-environmental, economical products for metal treatment include biodegradable cleaners and paint strippers. Often, before rust can be removed from the metal, soil or paint must first be removed. 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, 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 developed with the consumers safety in mind. It is free of chlorinated solvents, methanol, toluene, and acetone; yet removes most paints within thirty minutes.

Delivery Systems

Cortec’s Corwipe® is a revolutionary multi-purpose wipe that cleans oils, soil, grease, and light rust. Corwipe’s are environmentally safe; they 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, or tropical environments.

Cortec® can recreate your current colors with a customized formula or simply match it from our extensive list of standard colors. Most Cortec® coatings have outstanding UV resistance. Cortec® products also have excellent gloss retention, which is important when aesthetics are a consideration.

With environmentally safe VpCI® technology, your equipment and products will be effectively protected against humidity, saltwater, and oxidizing atmospheres as well as corrosive industrial, marine, and tropical environments.

Traditional coatings rely on sacrificial metals (zinc, chromates, aluminum) for inhibition. Due to the large particle size of these inhibitors, gaps exist which allow corrosion to start and eventually expand, causing coating failure.

Cortec® VpCI® coatings use the patented VpCI® technology to protect the metal substrate with a tight bonding molecular structure. This system eliminates the gaps which occur with traditional inhibitors and prevent corrosion from starting.

Traditional Coatings vs. Cortec® Coatings
Eco Products: **EcoAir**

Time tested and proven aerosol technology: EcoAir® Air-Powered Aerosol products. We provide aerosol products powered by compressed air rather than traditional chemical propellants. The formulation 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
- Very low or no environmental impact. Safe to ship and store
- Unique water-based formulation for the toughest maintenance applications

**Safe for the Environment**

EcoAir® products do not contain propellants, CFCs, or HCFCs that affect the atmosphere and ozone layer. Many EcoAir® products are formulated with biodegradable and non-toxic ingredients.

**Safe for the User**

EcoAir® products are specially formulated to provide safety for consumers and the environment. These safety characteristics are reflected in the HMIS ratings printed on the labels for each product. The products do not contain 1,1,1 trichloroethane, or chlorinated solvents.

**Safe for Storage**

EcoAir® products do not have storage or fire insurance restrictions. They can be stored like any non-aerosol product. EcoAir® products should be stored at room temperature like any water based product to avoid freezing.

**Safe for Shipping**

EcoAir® products can be shipped by air freight or any conventional shipping service.
Eco Products: EcoLine®

EcoLine® products are based on renewable soybean derivatives or canola oil. Cortec’s EcoLine® soya-based products are completely biodegradable and provide excellent lubricity, cleaning action, and corrosion protection.

EcoLine® heavy duty maintenance products incorporate Cortec’s VpCI® technology and are available as surface cleaner & degreasers, all purpose long term rust preventative lubricants and cutting fluids.

Biodegradable Films:
Eco-Corr®, Eco Film®, Eco Works®, & Eco Wrap®

Cortec® is a world leader in biodegradable and compostable films. Cortec’s technological breakthrough of fully biodegradable films are designed to help businesses and governments to comply with stringent environmental guidelines. Eco-Corr® Film, Eco Works®, Eco Wrap®, and Eco Film® are completely biodegradable in commercial composting. Eco Film® is superior to traditional films in many ways with extensive testing showing that physical properties exceed conventional LDPE films. Eco-Corr® Film incorporates Cortec’s patented VpCI® technology; it is ideal for packaging applications where metal corrosion protection is crucial.

Eco Products: EcoSpray & EcoClean®

EcoSpray and EcoClean® products are designed to attack the toughest corrosion problems without polluting the environment. They provide chemicals without aerosols, propellants, or ozone-depleting CFCs. Fast-acting and dependable, EcoSpray and EcoClean® are leaders in environmentally safe corrosion protection technology.
Corrosion Inhibiting Additives for Coatings, Fluids, Adhesives, and Plastics

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

Cortec® VpCI® additives are a sound business investment; by increasing the corrosion protection capability of products, VpCI’s add significant value.

Cortec® VpCI® technology protects continuously and is self-replenishing for uninterrupted protection in contact and vapor phase. Our products do not contain chromates, heavy metals, nitrites, or chlorinated hydrocarbons.

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

Generic Additives

Cortec® augments its proprietary line of VpCI® 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 industry standards: ISO 9001 and ISO 14001.
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<th>Metals</th>
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**After a product name applied to concrete only**

<table>
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<th>Cortec® Corporation Product Key:</th>
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<tr>
<td>VpCI® Electronic Products</td>
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<td>VpCI® Powders</td>
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<td>100% Biodegradable Packaging</td>
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**Cortec®:**
- 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/outside storage.
- 3 – Outside Sheltered: In addition to the two conditions described above, for use in sheltered/outside storage.
- 4 – Outside. In addition to the three conditions described above, for use in uncovered/outside storage.
- 5 – Immersion: In addition to the four conditions described above, also for immersion service in corrosive liquids such as salt water, crude oil, etc.
- ✓ Indicates the product is safe to use on specific metal. Consult Cortec® for application information.

**Consultation Key:**
- ☑ Recommended
- ☑ Consult Cortec® for Specific Usage
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**CAUTION** Do Not Use With Indicated Metals
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### Application Keys:

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 unventilated storage.
3. Outside Sheltered: In addition to the two conditions described above, for use in sheltered/outside storage.
4. Outside: In addition to the three conditions described above, for use in uncovered/outside storage.
5. Immersion: In addition to the four conditions described above, also for immersion service in corrosive liquids such as salt water, crude oil, etc. 
   - Indicates the product is safe to use on specific metal. Consult Cortec® for application information.
6. **CAUTION** Do Not Use With Indicated Metals

### Consultation Key:

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

### Cortec® Corporation Product Key:

- VpCI® Electronic Product
- VpCI® High Performance Cooling
- VpCI® Additives for Coatings & Fluids
- VpCI® Packaging Products
- VpCI® Metallurgical Products
- VpCI® Water Treatment Products
- VpCI® ECO Products
- Surface Preparation Product
- VpCI® Enhanced Construction Products
- VpCI® Enhanced Lubricants
- VpCI® Powders
- 100% Biodegradable Packaging

* After a product name; applied to concrete only
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<th>Protection Guide</th>
<th>Metals</th>
<th>CAUTION</th>
<th>Application Keys:</th>
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**Consultation Key:**
- Green: Recommended
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- Red: Not recommended or test data not available

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* — CAUTION Do Not Use With Indicated Metals
**VpCI® Electronic Products**

**VpCI®-101 Impregnated Foam Device, Patented**
Unique dual action: desiccant/VpCI® protection.
VpCI® impregnated foam for multimetal protection. Comes with adhesive backing and individually packaged in plastic. Each device is 1.25” (32 mm) wide, 3” (76 mm) long, and 0.25” (6 mm) thick. Use one device per 1.0 cu. ft. (28 l) of enclosed space. Nitrite free, non-toxic. NSN 6850-01-338-1392.

**Package:** 50 per carton

**VpCI®-105/111 Plastic Emitter, Patented**
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 6850-01-406-2080, MIL-I-22110C (Comm. Equiv.)

**VpCI®-111**: NSN 6850-01-408-9025, MIL-I-22110C (Comm. Equiv.)

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

**VpCI®-150 & 170**
Adhesive Backed Foam Tapes, Patented
unique dual action: desiccant/VpCI® protection. Breathable, open-cell foam, nitrite free, for multimetal protection. Comes with adhesive backing and individually packaged in plastic.

**Package:** 12 per carton

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

**Package:** 10 individually wrapped cups carton

**Eco Emitter**
Bibased emitting device filled with nitrite free VpCI®, for multimetal protection. Constructed from biodegradable and renewable materials. Powered by nano VpCI®. Protects up to 0.25 m².

**Package:** 10 emitters per carton.

**ElectriCorr® VpCI®-238/239**
Multifunctional formulation providing three-way protection: multimetal corrosion protection, antistatic and cleaning action. Corrosion inhibiting spray provides, ultrathin, protective film. For use in enclosed environments on electronic equipment and components. Will not alter electrical resistance, magnetic or thermal properties.

**VpCI®-239** is the outdoor version of VpCI®-238.

**NSN** 6850-01-413-9361

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

* Used by global military personnel

**ElectriCorr® VpCI®-248**
Designed for use in a sheltered environment, its continuous vapor action saves money by extending product life and eliminating downtime due to corrosion. It forms a molecular film effective against aggressive environments, including industrial, marine and tropical climates. This film does not alter the electrical, resistance or magnetic properties.

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

* Used by global military personnel

**ElectriCorr® VpCI®-286**
Nonconductive acrylic conformal coating that combines excellent moisture and corrosion resistance with Cortec’s patented vapor corrosion inhibitor technology.

**Package:** 11 oz. aerosol cans (312 gram), 5 gallon (19 liters) pails, 55 gallon (208 liters) drums, totes and bulk

**Process Additives**

**Eco Flow™ System**
Eco Flow™ is a two component, single dosing system specifically designed for pipelines carrying water or a mixture of hydrocarbon and water.

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

**VpCI®-629 Bio**
It is the only oilfield inhibitor product on the market which combines high level of corrosion protection, biodegradability and low toxicity. VpCI®-629 Bio is soluble in crude oil and dispersible in fresh water and brine solutions. As a fast-acting and long-term inhibitor, it forms an effective corrosion inhibiting barrier for both ferrous and nonferrous metals in the presence of water, halogens and corrosive gases such as dissolved oxygen, sulfide, carbon dioxide, and hydrogen sulfide.

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

**VpCI®-629**
Inhibitor for Oil, Gas and Petrochemical Processing Concentrated inhibitor that forms inhibitive layer to protect internal surfaces of process equipment, pipelines, tanks, vessels, reactors, valves, etc. Used for transportation and storage of hydrocarbon liquids and some gases.

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

**VpCI®-629/D/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/GL**
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®-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®-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/VpCI®-705 Bio**
A fuel additive corrosion preventive additive for gasoline, diesel, gasohol mixes and alcohol fuels. It also works as fuel stabilizer and water emulsifier. Soluble in both methanol blends as well as neat methanol fuel or neat gasoline. Approved by General Motors Corporation (approval #1066180 GM EMD Division).

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

**VpCI®-1238**
A liquid additive for vapor degreasing, cleaning & stripping baths. The 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 60°F (-50° C) to 280°F (140°).

**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk
**VpCI®-338 Liquid Corrosion Inhibitor**

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.

**VpCI®-316 Liquid Concentrate**

Biobased & Water Based

VpCI complex. It functions by reacting with surface copper oxides to form a strong, insoluble polymeric complex. This complex creates a protective layer or film on the copper surface.

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

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

Ready-to-use vegetable oil based liquid for multi-metal corrosion protection. Provides excellent protection to finely machined surfaces such as gun barrels, honed or mirror-like finishes. Also provides excellent protection when used as an edge spray for shipping 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

**VpCI®-337 Liquid Corrosion Inhibitor**

Water-based VpCI liquid 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.

**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. It is also available as a super concentrate VpCI®-338SC.

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

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

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

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

**VpCI®-345 Coolant/Lubricant**

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

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

**VpCI®-347 Heavy Duty Lubricant**

Soluble-oil based lubricant for use in heavy duty machining operations. Excellent for use in drawing, broaching, turning, cutting and stamping operations. Effective in dilutions as low as 1:40 in water.

NATO 6850-66-132-6101, NATO 6850-66-132-6102, NATO 6850-01-470-2740

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

- Used by global military personnel

**VpCI®-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.

**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.

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

- Used by global military personnel

**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 long-term (up to 2 years +) indoor protection.

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

**VpCI®-327 Solvent-based Concentrate**
Ready-to-use, solvent-based rust preventative for indoor corrosion protection. Formulated for the removal of finger prints and other stains from metal surfaces. MIL C-15074E (Comm. Equiv.), MIL C-81309 (Comm. Equiv.)
*Package:* 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.  
*Used by global military personnel*

**VpCI®-329 Oil-Based Concentrate**
Oil-based concentrate for use in gearboxes, crankcases and other lubrication systems. Provides excellent corrosion protection in both the liquid, and vapor phases. It is also available in super concentrate (VpCI®-329SC), ready-to-use (VpCI®-329D) (VpCI®-329F) versions.  
*Package:* 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, totes, bulk, and 16 oz. (473 ml) cans

**VpCI®-347 Heavy Duty Lubricant**
Soluble-oil based lubricant for use in heavy duty machining operations. Excellent for use in drawing, broaching, turning, cutting and stamping operations. Effective in dilutions as low as 1:40 in water.  
*NATO 6850-66-132-6101, NATO 6850-66-132-6102, NATO 6850-01-470-2740*
*Package:* 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, bulk, and 16 oz. (455 ml) cans

**CorrLube Food Grade Penetrant**
CorrLube Food Grade Penetrating oil contains only USDA H-1 approved ingredients and because of that can be used on equipment in sanitary areas where there is no exposure to edible products.  
*Package:* 16 oz. (453.6 g) tubs, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

**CorrLube VpCI® Lithium EP Grease**
VpCI® CorrLube is a lithium complex grease formulated with premium quality, severely hydrotreated base stock. It provides excellent resistance to oxidation and has high temperature stability.  
*Package:* 14 oz. (396 g) cartridges, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

**CorrLube VpCI® Super Penetrant**
Cortec VpCI® Super Penetrant offers a deep penetrating formulation that loosens frozen parts locked in rust.  
*Package:* 16 oz. (453.6 g) tubs, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

**VpCI® High Performance Coatings Removable**

**VpCI®-368 Liquid for Outdoor Protection/GPL Listed**
Solvent-based, temporary coating that provides extended outdoor, multi-metal protection. Leaves a translucent, waxy finish that is scratch resistant and self-healing. Can be removed with common solvents.  
*Package:* 5 gallon (19 liter) pails, and 55 gallon (208 liter) drums

**VpCI®-369 Liquid Concentrate/GPL Listed**
Oil-based barrier coating that provides extended, outdoor, multi-metal protection. Leaves a translucent, oily film that is scratch resistant and self-healing. Product can be diluted with oil. Apply by spraying, dipping, brushing or rolling. Can be easily removed with common solvents.  
*NSN 8030-00-244-1297, NSN 8030-00-244-1295, NSN 8030-01-149-1731, MIL PRF-16172E (Comm. Equiv.)*
*Package:* 5 gallon (19 liter) pails, and 55 gallon (208 liter) drums

**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®-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. Storm colors are available for the customer.  
*Package:* 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and liquid totes

**VpCI®-501 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®-812**
A wax paste that is long lasting, has high shine, and a rust blocker containing new, high performance VCIs. 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**
A 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 (.47 liter) and 5 gallon (19 liter) pails

**CorrShield® Transit Coating**
CorrShield® VpCI® Transit Coating is a water-reducible concentrate designed as a complete replacement for oil-based corrosion preventives.  
*Package:* 5 gallon (19 liter) pails and 55 gallon (208 liter) drums and liquid totes

**CorrShield® 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

**VpCI® High Performance Coatings Permanent**

**VpCI®-371 Aluminum Silicate Coating**
VpCI®-371 is a high temperature aluminum solvent borne silicone coating that provides excellent corrosion-resistance on metal substrates.  
*Package:* 5 gallon (19 liter) pails, and 55 gallon (208 liter) drums

**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®-375 One Coat**
Water-based acrylic one coat system (primer & topcoat) that successfully provides protection in harsh, outdoor, unsheltered applications.
**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes and bulk. Keep product from freezing.

**VpCI®-382 2K Water-Based Polyurethane Topcoat**
VpCI®-382 is a two-part waterborne polyurethane topcoat designed to be used over various primers. VpCI®-382 has high gloss, extremely low VOC, excellent chemical resistance, and excellent exterior durability when used over a primer.
**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes and bulk.

**VpCI®-383 Thin Film Coating**
Water-based, 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®-384 2K Polyurethane Topcoat**
VpCI®-384 is a two-part polyurethane topcoat designed to be used over a moisture cure urethane primers. In addition, VpCI®-384 has a high gloss, excellent hardness, extremely good flexibility, excellent solvent resistance, and does not contain aromatic solvents.
**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and liquid totes.

**VpCI®-386 Aluminum**
Water-based primer/topcoat, that provides protection from UV and abrasion for metals in harsh outdoor, unsheltered applications. Exceptional resistance based on a combination of organic-based inhibitors and an aluminum pigment.
**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) kit, liquid totes and bulk. Used by global military personnel.

**VpCI®-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®-394 Moisture Cure Urethane Topcoat**
VpCI®-394 is a high solids, aliphatic moisture cure urethane for use on marginally prepared structural steel. VpCI-394 should be applied onto VpCI-396, Cortec’s aromatic moisture cure urethane primer.
**Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, totes and bulk.

**VpCI®-395 2K Water-Based Epoxy Primer**
Water-based, 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-Cure Urethane Primer**
Aluminum filled, moisture-cure 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.

**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.

**CorrVerter® 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.

**VpCI® Additives for Coatings & Fluids**

- **M-95**
  It provides corrosion protection for steel, copper, brass, magnesium, aluminum, bronze, galvanized steel, and other ferrous and non-ferrous metals and their alloys.
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

- **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-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**
  **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.
Cortec® Corporation: Total Corrosion Control

- **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, naphthenic, 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-241 Additive**
  An inhibitor for protection of aluminum and its alloys from 'in can' corrosion and also water-based coolants, process and metal working fluids.
  
  **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-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-408 Additive**
  a corrosion inhibitor for brake fluid. It is compatible with DOT 3, 4, and 5 brake fluids, but is especially effective in silicon based brake fluids, such as DOT 5.
  
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

- **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-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-528/528L**
  Additive for hydraulic fluids used in subsea production control systems.
  
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

- **M-529/529 SC 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 demulsifier for the use in hydraulic and gear oils.
  
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

- **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

- **M-640/640L Additive for Engine Coolants**
  
  **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 hydrotreating.
  
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

- **S-111**
  Powder additive for aqueous alkaline cleaners that provides excellent flash corrosion protection at low concentrations for parts in-process.
  
  **Package:** 50 pound (23 kg), 100 pound (223 kg) and bulk

### VpCI® Packaging Products

#### Films/Plastics/Wovens/Non-wovens

- **VpCI®-125 Static Dissipative Film, Patented**
  
  **Package:** Standard and custom sizes

- **VpCI®-126 Blue Multimetal Heat Sealable Film, Patented/QPL Listed**
  
  **Package:** Standard and custom size bags, tubing and sheeting

- **Bio-Pad™**
  A unique flexible corrosion inhibiting device constructed from 100% biobased non-woven material. It provides an ecofriendly and sustainable packaging option for corrosion inhibition.
  
  **Package:** Custom sizes

- **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 moist-sensitive and oxygen sensitive metal parts. Ideal for vacuum packaging. MIL-PRF-131J(Comm. Equiv.)
  
  **Package:** Available in custom sizes as pouches, covers, blankets, etc

- **CorrNetting**
  CorrNetting is extruded 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
This has 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® Cold Seal Film
Cohesive system with VpCI® protection. Sticks firmly and only to itself.
Package: Custom size roll stock

Cor-Pak® VpCI® Corrugated PE Sheeting
100% recyclable packaging material. Easily fabricated into boxes, containers and custom totes.
Package: Available in custom size sheeting

Cor-Pak® Fabric LD
A strong wet laid nonwoven fabric composed of a combination of synthetic and cellulosic fibers.
Package: Available in rolls to precisely fit a particular application

Cor-Pak® EX VpCI® Film
Package: Standard and custom size roll stock and sheeting

Cor-Pak® VpCI® Liner Film
Exceptionally light (25 microns/1 mil) 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® Skin Film, Patented
Transparent skin film with VpCI® for multimetal protection. Offers high clarity, industrial, and retail packaging.
Package: Custom sizes

Cor-Pak® VpCI® Stretch Film, Patented
Package: Standard and custom roll stock

EcoWeave® VpCI® Woven Polyethylene
VpCI® film designed for use in applications where additional strength and tear resistance are required.
Package: Custom sizes

Eco-Corr Film®
BPI Certified 100% biodegradable and compostable film utilizing Cortec’s patented VpCI® technology. It provides better tensile strength, tear strength and ultimate elongation than low density polyethylene films. It is also heat and water stable and does not disintegrate or break apart while in use.
Package: Standard and custom roll stock and bags

Eco-Corr Film® ESD
A polymer extruded film that offers the same ESD and corrosion inhibiting properties as VpCI®-125 and is 100% biodegradable.
Package: Custom roll stock and bags

EcoShield® Fabric
A multiple layered protective fabric with a non-woven, soft inside layer. EcoShield® Fabric protects valuable items from corrosion and mechanical damage (i.e. scratching) during storage and shipment. It is reusable and recyclable.
Package: Can be sewn to custom sizes

EcoShield® VpCI® Linerboard
EcoShield® VpCI® Linerboard is a unique product that combines Cortec’s field proven vapor phase corrosion inhibitors (VpCIs) and a barrier coating. Also available as EcoShield® Linerboard, which does not contain VpCI®.
Package: Available in 42#/msf (205 g/m2) linerboard basis weight and custom constructions also available.

MilCor® VpCI® Shrink Film, Patented
Composite film, containing the ultimate additives package: Cortec® multi-metal Vapor phase Corrosion Inhibitors (VpCIs), with UV stabilizers. Film thickness 10 mils (250 microns).
Package: Available in sheeting and tube form

VpCI® Packaging Products
Papers & Paper Coatings

Anti-Skid Linerboard/VpCI® Anti-Skid Linerboard
Cortec® VpCI® Anti-Skid Linerboard is designed to prevent corrosion as well as slippage of cases, cartons and bags up to a twenty degree slide angle.
Package: Standard and custom sizes

VpCI®-144 Paper
Multimetal VpCI® barrier coated paper. Excellent moisture barrier. Replaces polyethylene coated papers, recyclable, repulpable, and non-toxic.
Package: Standard and custom size roll stock and sheeting

VpCI®-145 Paper
A static dissipative corrosion inhibiting paper combines corrosion inhibiting and static-dissipative properties to provide a complete packaging paper for your valuable items.
Package: Custom size roll stock and sheeting

VpCI®-146 Multimetal Inhibitor Paper, Patented
Package: Standard and custom size roll stock and sheeting

VpCI®-148 Paper, Grease Resistant, Corrosion Inhibiting Paper
In addition to its excellent corrosion inhibiting properties, VpCI®-148 also provides resistance to greases, oils, and solvents.
Package: Standard and custom size roll stock and sheeting

VpCI®-149 Paper
A corrosion inhibiting paper for the protection of a wide variety of metals. Formulated specifically to provide superior protection for sensitive metals such as copper, aluminum, and cast iron.
Package: Standard and custom size roll stock and sheeting

VpCI®-350 AHS
Coating for the paper, linerboard, and corrugated box industry. Multi-metal VpCI® produces a thin, non-penetrating coating.
Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

VpCI®-350/357 Coating Solution
Multimetal VpCI® 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
Water resistant 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)
Cortec® Corporation: Total Corrosion Control

- **EcoShield® Paper & Linerboard**
  Coated with a moisture barrier coating. One of its key features is that it is fully repulpable while displaying barrier properties similar or better than those of wax or polyethylene coated paper or linerboard.
  **Package:** Custom sizes and constructions available upon request, in a 42 lb/1000 sq ft (205 g/m²) linerboard basis weights

- **Cor-Pak® Linerboard**
  The premium corrosion inhibiting linerboard 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/m²) linerboard basis weights

- **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

- **Corrosorber® VpCI® Paper**
  This paper is specifically designed for protection of precious metals such as silver, gold, brass, tin and copper.
  **Package:** Available in standard and custom size roll stock and sheeting

### VpCI® Packaging Products

#### Devices, Emitters, & Foam

- **VpCI®-130 Series Impregnated Foam, Patented**
  **Package:** Standard and custom sizes available

- **BioPad**, Patent Pending
  BioPad is a unique flexible corrosion inhibiting device constructed from 100% biobased non-woven material.
  **Package:** Custom sizes

- **Cor-Pak® 1 MUL Breathable Pouches, Patented**
  Tyvek® breathable membrane filled with multmetal VpCI® (1-MUL). For applications where powder contamination is not acceptable. GSA 8030-01-208-1769
  **Package:** 300 per carton

- **Cor-Pak® VpCI® Tablets**
  All purpose VpCI® for multmetal applications. Insert into packages. Nitrite free, for non-ferrous and ferrous metals. Conforms to MIL-I-22110C
  **Package:** 1000 per bottle, 4 bottles per carton

- **Desicorr®/Desicorr VpCI®**
  Desicorr® is a pouch containing desiccant. Desicorr VpCI® is a two-in-one pouch which contains unique combination of desiccant and VpCI® (Vapor phase Corrosion Inhibitor).
  **Package:** Come in cartons of 300 units. Store at room temperature. Close cartons between uses. The shelf life of unopened cartons of pouches is up to 24 months or until color change is observed.

#### VpCI® Water Treatment Products

- **VpCI®-611**
  Additive for hydro testing, wet blasting and flash rust prevention for ferrous metals.
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

- **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®-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®-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

- **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)

- **BioClean 612**
  A powerful aliphatic amide based organic penetrating agent and organic deposit dispersant for use in industrial applications.
  **Package:** 5 gallon (19 liter)

- **Cooling Loop Gator®**
  A Vapor phase Corrosion Inhibitor (VpCI®) powder packaged in polyvinyl-alcohol (PVA) water-soluble bags developed for seasonal lay-up.
  **Package:** 4 x 2.2 lb (4 x 1 kg) bags per box

- **Cooling Tower Frog®**
  A Vapor phase Corrosion Inhibitor (VpCI®) powder packaged in polyvinyl-alcohol (PVA) water-soluble bags for dry lay-up.
  **Package:** 2 x 4 lb (2 x 1.8kg) bags per box
A unique combination of 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:** 4 x 2.2 lb (1.0 kg) bags per box

**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-8**
S-8 is a unique product formulated only from FDA approved ingredients. This product is especially useful for the corrosion protection of metallic cans with different food items during their washing or sterilization of the packed food.

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

**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/S-14 F / S-14 RO**
General purpose water treatment antiscalant. Non-flammable and non-toxic.

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

**S-14 Bio**
A unique green building block designed for cooling towers and other open-loop, recirculating cooling systems. It is a rare combination of a powerful scale inhibitor and excellent multi-metal corrosion protection.

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

**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-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 or 5, 50, 100 lbs drums.

**S-607, Bioremediation Additive**
A safe, effective, and environmentally sound alternative for the elimination of petroleum and crude oil contaminates in soil and water.

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

**VpCI® Eco Products**

**EcoAir® VpCI®-337**

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

**EcoAir® VpCI®-414**

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

**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

**EcoAir® VpCI®-422**
Water-based, non-toxic rust remover. Offers multmetal protection while removing rust. Non-flammable.

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

**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® 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/ Eco-Corr ESD**
A biodegradable polymer extruded film containing VpCI®. ESD version including anti-stat properties also available.

**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® 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-1 criteria and USDA 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® 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
Cortec® Corporation: Total Corrosion Control

- **EcoLine® 3220**
  A 100% biobased ready-to-use temporary coating. This canola oil-based product offers a tenacious film which clings to metal surfaces, providing excellent contact corrosion protection in storage and shipment. In addition, it provides long lasting vapor corrosion inhibition.
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

- **EcoLine® 3690**
  A biodegradable, biobased, ready-to-use temporary coating designed for severe marine and high humidity conditions.
  **Package:** 5 gallon (19 liter) plastic pails, 55 gallon (208 liter) metal drums

- **EcoSpray VpCI®-238**
  **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

**Surface Preparation Products**

- **VpCI®-405 Cleaner/Degreaser Foaming**
  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/SC Cleaner/Degreaser/Parts Washer Cleaner**
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

- **VpCI®-411/411 Gel Cleaner/Degreaser Foaming**
  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 CorClean 11 oz (312 grams) aerosol cans

- **VpCI®-414 Cleaner/Degreaser Foaming**
  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 Foaming/QPL Listed**
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk. Also available as CorClean 18 oz (510 grams) aerosol cans

- **VpCI®-416 Cleaner/Degreaser Foaming**
  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 gram) spray bottles

- **VpCI®-417 Cleaner and Degreaser (Powder)/Ultrasonic, 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. It is also available in Safe-T-Charges 5 lb (2.3 kg) water soluble bags.

- **VpCI®-418/418L/418LM Cleaner Degreaser/Part Washer Cleaner**
  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. It is also available as Safe-T-Charges 5 lb (2.3 kg) water soluble bags and in 418LM (sodium free version).

- **VpCI®-419 Cleaner/Degreaser Foaming**
  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/Oxide Removers**
  Environmentally friendly, biodegradable rust and tarnish remover for ferrous and nonferrous 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. It is also available in EcoClean®-423, 16 oz. (459 gram) pump spray bottle and EcoAir® VpCI®-423 16 oz. (455 gram) cans

- **VpCI®-425 Neutral Rust Remover (Powder)/Oxide Removers**
  **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/Oxide Removers**
  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/Oxide Removers**
  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®-429 Multi-Metal Cleaner/Oxide Removers**
  A very effective, pH neutral, rust remover and cleaner for different metals. It not only completely cleans rusted surfaces, but also prevents further rusting during the cleaning process.
  **Package:** 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

- **VpCI®-432/433 Paint Remover/Paint and Graffiti Removers**
  Heavy-duty liquid or gel paint stripping formulation designed to remove paints and coatings. Particularly effective for remo alkyls, 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. It is also available in EcoSpray 16 oz (454 gram) spray bottles.
MCI® Concrete/Construction Products

- **MCI® Anti-Graffiti Coating**
  Two-component, solvent based aliphatic urethane for concrete to provide easy removal of graffiti.
  Package: 5 gallon (19 liter) pails, 2.5 gal pails

- **MCI® Architectural Coating**
  Water-based primer/topcoat containing corrosion inhibitor designed to provide protection in harsh, outdoor applications.
  Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

- **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® Construction Film**
  Black PE film designed for use in the construction industry as a vapor barrier. Provides multimeal corrosion and UV protection, and is 100% recyclable.
  Package: 20’ x 100’ sheeting (6.10 m x 30.48 m)

- **MCI® Creteskin™**
  An industrial strength release agent containing Cortec’s Migratory Corrosion Inhibitors (MCI®). It is designed for protecting equipment, vehicles and forms in the construction industry.
  Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums. MCI® Creteskin™ has a shelf life of up to two years in a sealed container

- **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

- **MCI® Fibers**
  MCI® Fibers are mono-filament polypropylene-based fibers containing Migratory Corrosion Inhibitors (MCI®).
  Package: 5 lb (2.3 kg) and 50 lbs (23kg) bags, and 100 lbs (45 kg) drums

- **MCI® Fiber Grenade**
  The bag dissolves easily when in contact with water in the concrete mix. After approximately two minutes of mixing, the bag will completely dissolve and the MCI® compounds will disperse in the mix to protect reinforcing steel, galvanized steel, and other metals embedded in concrete.
  Package: 20 - 1 lb bags per box. Regular bag is approximately 10” x 14” (25.4cm x 35.6cm). Metric bag is approximately 12” x 14” (30.5cm x 35.6cm). Please specify if you need metric bags.

- **MCI Grenade®**
  Migratory Corrosion Inhibitor powder packaged in water-soluble PVA bags. One grenade provides corrosion protection to one cubic yard (0.76 m3) of concrete.
  Package: 20 - 1 lb (500 g) 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 m3) of concrete.
  Package: 100 - 0.02 lb (10 g) bags per box

- **MCI® Peel off Coating**
  A corrosion inhibiting, modified water-based acrylic peelable coating. This product provides mechanical protection against nicks, abrasion, scratches, and over-spray to the surface that it covers.
  Package: 5 gallon (19 liter) plastic pails, 55 gallon (208 liter) metal drums, totes and bulk

- **MCI®-309**
  Powder for corrosion protection of ferrous metals in recessed areas, interior cavities and voids.
  Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

- **MCI®-2000 Migrating Corrosion Inhibiting Admixture for Concrete, Patented**
  Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

- **MCI®-2001 Admixtures, Patented**
  MCI®-2001 is a powdered form of MCI®-2000, which contains amino alcohol based Migratory Corrosion Inhibitors and are concrete admixtures.
  Packages: 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 Gel, Migratory Inhibiting Gel for Concrete Structures, Patented**
  An injection treatment for existing concrete to prevent corrosion of embedded steel, especially in areas subject to cracks and spalling.
  Packages: 13 oz. (0.38 liter) cartridges, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

- **MCI®-2005/ MCI®-2005 NS 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/ MCI®-2006 NS 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.
  Packages: 5 lb. (2.3 kg) boxes, 50 lb. (22.7 kg) and 100 lb. (45.4 kg) drums

- **MCI®-2007 Super Corr®, 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.
  Packages: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk
Cortec® Corporation: Total Corrosion Control

MCI®-2007 R, Patent Pending
Polymeric-based, water-reducing concrete admixture containing MCI®-2006 technology. MCI®-2007R 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 Cort/MCI®-2008 L Via Cort, Patent Pending
Polymeric-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: MCI®-2008: 5 gallon (19 liter), 55 gallon (208 liter) drums and 50 lb (22.7 kg) drums and 100 lb (45.4 kg) drums. MCI®-2008L: 5 gallon (19 L) and 55 gallon (208 L) drums. The shelf life of the product is 12 months in a sealed drum.

MCI®-2018 Sealer, Patented
A slurry-based concrete sealer containing time-proven Migrating Corrosion Inhibitors (MCI®). MCI®-2018 is a small molecule product that allows deep penetration into concrete and provides water repellency by chemically reacting with the cementitious substrate under proper application. Treated substrates are hydrophobic and retain their original appearance. It seals surface pores, which prevents intrusion of chloride and carbonation and protects from the ingress of wind-driven rain. Treated concrete surfaces are fully breathable and their natural moisture-vapor transmission is not affected.
Package: 5 gallon (19 liter) pails and 55 gallon (208 liter) drums

MCI®-2019: MCI®-2019 AG Concrete Sealer, Patent Pending
40% solids, silane-based, low VOC concrete sealer with Migrating Corrosion Inhibitors for protection of concrete and embedded rebar. AG version includes green fugitive dye.
Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

MCI®-2019 W
Water-based, 40% silane sealer containing MCI® Spray, brush, or roller applied.
Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

MCI®-2020: MCI®-2020 V/O / MCI®-2020 P
Migratory Corrosion Inhibitor for Existing Concrete Structures
Amine Polymeric-based surface treatment for existing concrete to prevent corrosion of embedded steel. Certified by Underwriter’s Laboratories to meet NSF Standard 61 guidelines. MCI®-2020 V/O is a more viscous version for vertical and overhead applications. Also available as a powder (MCI®-2020 P).
Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums. Powder package: 100 pound (45 kg) drum (which reconstitutes to one 55 gallon (208 liter) drum)

MCI®-2020 Gel
An injectable form of corrosion inhibitor, which uses chemistry similar to Cortec’s MCI®-2020 surface treatment.
Package: 10.3 oz. (304 mL) caulking tubes, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

MCI®-2020 M / MCI®-2020 M V/O
Migrating corrosion inhibitor surface treatment for existing concrete to prevent corrosion of embedded steel. A high viscosity version of MCI-2020 M is available as MCI®-2020 M V/O, which is specifically designed for vertical and overhead application.
Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

MCI®-2020 M SC
Concentrated version of MCI®-2020 M that provides even better corrosion protection. Diluted 1:1 with water to make ready to use product.
Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

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®-2022 V/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.
Packages: Powder: 26.4 lb. (12 kg) buckets. Resin: 11 lb. (5 kg) pails

MCI®-2025 Concrete Primer HS
Chemically resistant, water-based, two component 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: 0.75 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®-2039 SC Concrete Repair Mortar
Single component, fiber reinforced repair mortar. Excellent adhesion properties, vapor transmission properties. Can be used for any type of concrete repair. It 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®-2061 Surface Cleaner
A powerful cleaner that safely and effectively cleans oil stains on concrete. This hard surface cleaner is unique because it combines powerful cleaning chemistry with microorganisms capable of biodegrading hydrocarbons, such as those found in oil, diesel and other materials that stain concrete.
Package: 5 gallon pails. The shelf life is 2 years with a maximum loss of 1.0 log at recommended storage conditions

MCI®-2241/MCI®-2242 Watertight Coat
MCI®-2241/2242 are flexible and breathable waterproofing membranes based on a unique combination of acrylic emulsion, Portland cement and fine fibers. Use them to waterproof all types of above- or below-grade concrete and masonry including foundations, block walls, balconies, parapets, planter boxes, water ranks, and fountains. MCI®-2241 is a gray color, MCI®-2242 is white.
Package: MCI®-2241/2242 Component A is available in 2.3 gallons (8.9L) packaged in 5 gallon (19 liters) pail. Component B is available in 25 lb (11 kg) bags. Each kit yields 4 gallons (15 L). Shelf life is 12 months in original, properly stored, in unopened container.
MCI®-2246 Bonding and Anticorrosion Agent
MCI®-2246 is a unique combination of Portland cement, microsilica, epoxy, and acrylic resin. Use it for bonding new concrete or mortar to old and for protecting reinforcing steel against rust and corrosion. When used as a bonding agent, it provides up to a 24-hour open time. Package: Store in a dry area, between 50°F (10°C) and 85°F (29°C). Protect from direct sunlight and extreme heat. MCI®-2246 Part A is available in a 2 part kit including 1 gal (3.8 L) and Part B 28 lbs (13 kg) bags. Shelf life of the product is 12 months in original, properly stored container.

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

VpCI® Enhanced Lubricants

**CorrLube VpCI® Enhanced Lubricating Grease**
Thixotropic grease with extreme pressure (EP) properties formulated for corrosion protection of metals exposed to severe environments. Package: 14.5 oz. (0.43 liter) cartridges, 5 gallon (19 liter), 55 gallon (208 liter) drums

**CorrLube Hydraulic fluid**
Synthetic lubricating oil for automotive brakes, machine tools, pumps, bearings, etc. Provides excellent corrosion protection. Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums

**CorrLube Industrial Gear Oil**
Synthetic lubricating oil, used for a wide range of opened and closed gear sets. Provides excellent corrosion protection. Package: 16 oz. (0.47 liter) bottles, 5 gallon (19 liter) pails, 55 gallon (208 liter) pails

**CorrLube VpCI® Motor Oils**
Automotive engine oils with VpCI® protection. Grade SAE 10W-30 and 15W-40. Package: 1 quart (.94 liter), 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk

**VpCI® Powders**

**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®-309/309SF 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®-309 Pouch**
VpCI®-309 Pouch contains a Vapor phase Corrosion Inhibitor (VpCI®) powder for corrosion protection of ferrous metals in recessed areas, interior cavities and voids. The pouches are constructed from breathable Tyvek. Packages: String of 50 pouches per carton

**VpCI®-608 Powder**
A Vapor phase Corrosion Inhibitor powder for corrosion protection of ferrous metals in recessed areas, interior cavities and voids, such as double bottom in storage tanks. Package: 100 pound (45 kg) lined drum

**VpCI®-609/609S Powder**
Powder for wet or dry lay-up of ferrous metals or aluminum. Packages: 5 pound (2.3 kg), 50 pound (23 kg) and 100 pound (45 kg) moisture barrier bags packed in fiber-lined drums

**EcoPouch VpCI®-609 Bio**
EcoPouch contains VpCI®-609 powder for corrosion protection of ferrous metals and aluminum. The pouches are constructed from breathable Tyvek®. Packages: String of 50 pouches per carton

**Bioplastics: Biodegradable, Soluble, & Renewable**

**BioCushion®**
A certified biodegradable air cushion for protective packaging applications and provides an environmentally friendly alternative to traditional void fill materials. Package: Custom sizes and printing available.

**Eco Film®**
100% certified biodegradable/compostable per ASTM D6400 and EN13432. Non-VpCI® product suited for all types of bag and packaging applications. Package: Standard and custom roll stock and bags

**Eco Sol®**
A water soluble, biodegradable polyvinylalcohol (PVOH) film, ideally suited for packaging of detergents and water treatment chemicals. Package: Is packaged in barrier film

**Eco-Corr Film® ESD**
A certified compostable polyester extruded film that offers ESD and corrosion inhibiting properties up to three times the strength of LDPE. Package: Standard and custom roll stock and bags

**Eco-Corr Film®**
Certified 100% biodegradable and compostable film per ASTM D6400 and EN13432 utilizing Cortec’s patented VpCI® technology. It provides better tensile strength, tear strength and ultimate elongation than low density polyethylene films. It is also heat and water stable and does not disintegrate or break apart while in use. Package: Standard and custom roll stock and bags

**Eco Works®**
100% certified biodegradable/compostable per ASTM D6400, available in many formulations biobased. It is more rigid Eco Film® and from 5-70% renewable content. Package: Custom sizes and formulations, bags and sheets

**Eco Wrap®**
An unique combination of a certified compostable polyester film with a cling coating. It is designed to run on existing stretch film equipment by simply adjusting the tension setting. Package: Cradle packed pallets and individually boxed rolls
Vision Commitment Solutions (ISO 9001 Certified)

World Class Product Offerings
An innovative producer of leading edge products.

World Class Customer Service
A positive, long-lasting impression through every link of our company.

World Class Environmental Commitment
Cortec® commits to continued development of processes and products that are useful, non-hazardous to the environment, and recyclable whenever possible.

An Ethical and Respectful Company Culture
Respect and treat our colleagues, customers, and vendors as we would our own family members.

Environmental (ISO 14001 Certified)
Cortec’s strong environmental concern is demonstrated in the design and manufacturing of products that protect materials of all kinds from environmental degradation. A strong commitment to produce recyclable products made from sustainable resources has been and will be our future policy. This brochure can be recycled.

Visit our website for more information on Cortec® Vapor phase Corrosion Inhibitors.
CortecVCI.com and CortecMCI.com

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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.

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