

# Innovative Packaging Solutions for Corrosion Control and Prevention









# Cortec<sup>®</sup> – An Innovative Leader Providing Total Solutions to Today's Needs and Challenges

Cortec<sup>®</sup> Corporation, the global leader in VpCI<sup>®</sup> Technology, offers a full range of high quality packaging materials to protect metal goods from rust and corrosion. With decades of experience in industries across the globe, Cortec<sup>®</sup> is ready to provide an individualized solution for your specific needs including:

- Rust-free shipment of goods overseas
- In-process protection of partially manufactured goods
- · Long-term preservation of expensive equipment
- And much more!

Cortec<sup>®</sup> VpCl<sup>®</sup> packaging provides a time tested toolbox of corrosion solutions that have been used in countless industries. These tools are practical, easy to use, and reduce the need for applying hazardous and cumbersome rust preventatives. Cortec<sup>®</sup> helps you select the right "tool" for the job and then simplifies the disposal of the "tools" with many recyclable, environmentally friendly options.

## How Does Cortec® VpCI® Technology Work in Packaging Applications?

The success of Cortec<sup>®</sup> VpCl<sup>®</sup> packaging lies in its Vapor phase Corrosion Inhibitor Technology. This technology creates a protective environment inside each VpCl<sup>®</sup> package. Application is easy, typically with little or no surface preparation needed.

Special Vapor phase Corrosion Inhibitors embedded in VpCI<sup>®</sup> packaging travel through the air to form an invisible protective shield on all accessible metal surfaces inside the enclosed package. This VpCI<sup>®</sup> shield does not alter metal properties. Instead, it blocks the ability of oxygen, moisture, and other corrosive elements to attack the metal surface and make it rust.

After the metal part is taken out of the package, the VpCI<sup>®</sup> molecules float away, and the metal components, machinery, or products are ready for immediate use, no cleaning or degreasing required.

## Global Presence to Serve Customers Anywhere in the World

Cortec's widespread network of licensees, distributors, manufacturer's representatives, and field offices operates in over 100 countries on seven continents around the globe, providing faster and easier access to Cortec<sup>®</sup> solutions wherever you find yourself. In addition, Cortec's Global Services division is ready to deliver onsite preservation and training support based on years of experience in near and far reaches of the world.



# **Sustainability**

Cortec's strong environmental concern is demonstrated in the design and manufacturing of products that protect materials of all kinds from environmental degradation. Cortec<sup>®</sup> seeks continued development of processes and products that are useful, non-hazardous to the environment, and recyclable whenever possible. A strong emphasis on producing recyclable products made from sustainable resources has been and will be our future policy.

## VpCI<sup>®</sup> Papers—The Natural Biobased Option

VpCl<sup>®</sup> paper products serve as an excellent option for sustainable anti-corrosion packaging. Made from neutral/natural kraft paper (a natural plant-based resource), they are coated with a water-based VpCl<sup>®</sup> coating and easy to recycle in most cases. In addition, Cortec<sup>®</sup> has gone the distance to develop moisture barrier papers that offer water vapor barrier properties competitive with wax coated and polyethylene coated materials, but with the advantage of being readily repulpable and recyclable.

## VpCI® Films and Bags – A Leader in Recyclability and Resource Stewardship

Cortec<sup>®</sup> Corporation manufactures recyclable VpCl<sup>®</sup> films that are used across the globe to protect metal parts and equipment from corrosion during storage and shipping. Cortec's VpCl<sup>®</sup> film has already had a large impact on making corrosion protection more environmentally friendly by reducing the need for traditional hazardous and cumbersome rust preventatives. Cortec's film is fully recyclable, which allows Cortec<sup>®</sup> to incorporate recycled VpCl<sup>®</sup> film back into the manufacture of new films, while still achieving good quality VpCl<sup>®</sup> performance.

Cortec<sup>®</sup> reprocesses VpCl<sup>®</sup> film scrap and incorporates the "repro" back into the virgin film at up to 20 percent, a level at which Cortec<sup>®</sup> can ensure quality of the new product. Cortec<sup>®</sup> has expanded its film reprocessing program to allow customers to send their used VpCl<sup>®</sup> film back to Cortec<sup>®</sup>, creating a win-win-win situation for customers, Cortec<sup>®</sup>, and the environment. Instead of paying thousands of dollars for disposal, customers can now send used VpCl<sup>®</sup> bags and film to Cortec<sup>®</sup>, who pays shipping and gives customer credit in exchange for the benefit of having an additional source of repro. Both customer and manufacturer demonstrate environmental responsibility and reduce their carbon footprint in the process. The program is expected to save tens of thousands of dollars and tens of thousands of pounds of plastic annually.

## Compostable Film

In addition to anti-corrosion film and paper products, Cortec<sup>®</sup> produces a range of films compliant to ASTM D6400/EN 13432 for disposal in a commercial composting environment.\* These include basic compostable organics and yard waste bags with or without biobased content (BPI certified compostable, #890974), as well as Vapor phase Corrosion Inhibiting bags (compliant to ASTM D6400) for metals protection.



# **VpCI® Films and Bags**

Cortec's recyclable VpCI<sup>®</sup> plastic sheeting and bags are powerful, cost effective, and simple to use. They provide Total Corrosion Control for multiple metal types and come in many sizes and formats—from small Top-Seal bags that protect nuts and bolts, to 30 foot (9.1 m) wide heavy duty sheeting for storing giant industrial equipment outdoors. Available formats include

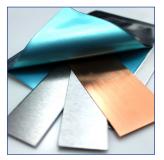
- Roll Stock
- Tubing
- Gusseted Bags
- Top-Seal Bags
- Shrink Film
- Heat Sealable Bags
- Bubble Wrap

Simply wrap, shroud, or pack your products or equipment in VpCI<sup>®</sup> films and bags for continuous protection during WIP (work in progress), storage, transit, lay-up, or mothballing.

VpCl<sup>®</sup> molecules in the films and bags vaporize and then condense on metal surfaces in the enclosed package, forming an invisible molecular protective layer against the corrosive forces of salt, excessive humidity, condensation, moisture, aggressive industrial atmospheres, and dissimilar metal corrosion. After the metal part is taken out of the package, the VpCl<sup>®</sup> molecules float away, and the metal components, machinery, or products are ready for immediate use, no cleaning or degreasing required.

Cortec<sup>®</sup> VpCl<sup>®</sup> films and bags are exceptional for protection of large equipment for export shipping, stretch wrapping of steel coils, packaging of highly sensitive electronic components, shrink wrapping of new vehicles and equipment, lining containers for shipments of multiple items, and packaging of small parts in zipper closure bags. VpCl<sup>®</sup> films and bags replace conventional rust preventatives such as oils and desiccants, allowing users to save time, hassle, and labor costs by eliminating the degreasing or coating removal required in the past. Using Cortec's VpCl<sup>®</sup> films will ensure your valued assets are clean, dry, corrosion free, and ready to use when they are unpacked.







# VpCI<sup>®</sup> Film and Bags Product Selection Guide

Description	Availability
Cortec's flagship high technology Vapor phase Corrosion Inhibitor film that protects metal objects from all types of corrosion including rust, tarnish, stains, white rust, and oxidation during storage or domestic and overseas shipments. Recyclable.	Roll stock, tubing, bags, and custom sheeting.
Cor-Pak <sup>®</sup> EX VpCl <sup>®</sup> Film is made using high-density polyethylene extruded with Vapor phase Corrosion Inhibitors to protect ferrous and most non-ferrous metals from corrosion. It is unaffected by most solvents, strong acids, and alkalis. Recyclable.	Made to order roll stock and sheeting.
Cor-Pak <sup>®</sup> VpCl <sup>®</sup> Anti-Stat Stretch Film is a high performance stretch film with multi-metal corro- sion protection and anti-static properties for ESD protection. Recyclable.	Custom sheeting and machine grade.
Cor-Pak <sup>®</sup> VpCl <sup>®</sup> Bubbles combine Vapor phase Corrosion Inhibitors with cushioning packing bubbles to provide protection against corrosion and physical damage for sensitive or delicate components. Recyclable.	Custom rolls.
A high performance, coextruded film that offers superior strength and stretch characteristics as well as multi-metal corrosion protection. Recyclable.	Hand wrap (stock) and machine grade (made to order).
A heavy duty film featuring Cortec <sup>®</sup> multi-metal Vapor phase Corrosion Inhibitors, flame retar- dant additives, and UV (ultra violet) inhibitors.	Custom sheeting.
A heavy duty film that inhibits corrosion on multiple metal types through contact-, barrier-, and vapor-phase protection. The film has high ultraviolet (UV) light protection to maintain the integrity of the film itself as well as the parts packaged within. It is effective in severe outdoor climates and can be shrink-wrapped for a custom fit. Recyclable.	Roll stock.
This film combines the most effective multi-metal corrosion protection with strong static dissipative properties. VpCl®-125 is recommended for packaging of integrated circuits, printed circuit boards, PCB components, telecommunications equipment, electronic and electrical panels, and enclosures. Recyclable.	Custom sheeting, tubing, and bags.
A coextruded version of VpCl <sup>®</sup> -126, a high technology Vapor phase Corrosion Inhibitor film that protects metal objects from all types of corrosion including rust, tarnish, stains, white rust, and oxidation during storage or domestic and overseas shipments. Recyclable.	Custom sheeting, tubing, and bags.
Cortec <sup>®</sup> VpCI <sup>®</sup> -126 EM UV Film combines high strength resins with ultraviolet light stabilizers (UV) and Vapor phase Corrosion Inhibitor Technology. Recyclable.	Custom sheeting, tubing, and bags.
In addition to protecting metal objects from corrosion, VpCI®-126 ES Film is specially formulated to provide increased mechanical properties for applications requiring a more durable film. Recyclable.	Custom sheeting, tubing, and bags.
VpCI®-126 FR is a custom grade corrosion-inhibiting film containing flame retardant additives for added safety and protection.	Custom sheeting, tubing, and bags.
Shrink film that combines high strength resins with ultraviolet (UV) light stabilizers and Vapor phase Corrosion Inhibitor Technology. This state-of-the-art film construction provides multi-metal protection for parts, equipment, and vehicles even in aggressive outdoor conditions. Recyclable.	Roll stock.
High technology Vapor phase Corrosion Inhibitor film protects a wide variety of metals from rust, tarnish, stains, white rust, and oxidation. Has excellent sealing properties using sealing temperatures of 190-240 °F (88-116 °C) and will shrink using a wide variety of shrink wrapping tools. Recyclable.	Roll stock.
VpCI®-226 Series Films combine the latest film technology with the most effective corrosion protection for all of your metal products. Cortec's specialized formula ensures that EcoShield® VpCI®-226 film and bags are 100% nitrite free. Your mind can be put at ease as you handle a film that contains no trace of nitrite yet effectively protects your packaged parts from corrosion, rust, and tarnish. Recyclable.	Roll stock and custom sheeting, tubing, or bags.
	Cortec's flagship high technology Vapor phase Corrosion Inhibitor film that protects metal objects from all types of corrosion including rust, tarnish, stains, white rust, and oxidation during storage or domestic and overseas shipments. Recyclable. Cor-Pak <sup>®</sup> EX VpCl <sup>®</sup> Film is made using high-density polyethylene extruded with Vapor phase Corrosion Inhibitors to protect ferrous and most non-ferrous metals from corrosion. It is unaffected by most solvents, strong acids, and alkalis. Recyclable. Cor-Pak <sup>®</sup> VpCl <sup>®</sup> Anti-Stat Stretch Film is a high performance stretch film with multi-metal corrosion protection and anti-static properties for ESD protection. Recyclable. Cor-Pak <sup>®</sup> VpCl <sup>®</sup> Bubbles combine Vapor phase Corrosion Inhibitors with cushioning packing bubbles to provide protection against corrosion and physical damage for sensitive or delicate components. Recyclable. A high performance, coextruded film that offers superior strength and stretch characteristics as well as multi-metal corrosion protection. Recyclable. A heavy duty film featuring Cortec <sup>®</sup> multi-metal Vapor phase Corrosion Inhibitors, flame retardant additives, and UV (ultra violet) inhibitors. A heavy duty film that inhibits corrosion on multiple metal types through contact-, barrier-, and vapor-phase protection. The film has high ultraviolet (UV) light protection to maintain the integrity of the film itself as well as the parts packaged within. It is effective in severe outdoor climates and can be shrink-wrapped for a custom fit. Recyclable. This film combines the most effective multi-metal corrosion protection with strong static dissipative properties. VpCl <sup>®</sup> -125 f. a, high technology Vapor phase Corrosion Inhibitor film that protects metal objects from all types of corrosion including rust, tarnish, stains, white rust, and oxidation during storage or domestic and overseas shipments. Recyclable. Cortec <sup>®</sup> VpCl <sup>®-126</sup> EM UV Film combines high strength resins with ultraviolet light stabilizers (UV) and Vapor phase Corrosion Inhibitor Technolo



## **VpCI®** Papers

Cortec's versatile range of VpCI<sup>®</sup> coated papers offers many recyclable and fully-repulpable corrosion protection options in widths nearing 100 inches (2.5 m) for single item packaging, parts interleaving, and more!

Our VpCl<sup>®</sup> papers are coated with proprietary Vapor phase Corrosion Inhibitors for superior corrosion protection of both ferrous and non-ferrous metal. Made from high quality neutral/natural kraft paper, these paper products do not contain fluorochemicals, nitrites, phosphates, silicones, chromates, or other heavy metals. Cortec<sup>®</sup> VpCl<sup>®</sup> papers are effective against aggressive environments including humidity, SO<sub>2</sub>, and H<sub>2</sub>S.

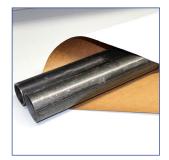
Cortec<sup>®</sup> multi-metal VpCI<sup>®</sup> papers eliminate the need to inventory a variety of papers for each type of metal you need to protect. They also prevent package contamination by utilizing high quality neutral/natural kraft paper. Most VpCI<sup>®</sup> papers are fully recyclable and repulpable.

Cortec<sup>®</sup> VpCl<sup>®</sup> papers are simple to use: there are no chemical concentrations to calculate or application systems to maintain. Simply wrap or interleave your metal parts in VpCl<sup>®</sup> paper and fold the edges together so there is no free airflow. Use adhesive tape as needed to hold paper folds in place. VpCl<sup>®</sup> molecules in the paper coating vaporize and condense in a protective molecular layer on the surfaces of metal enclosed inside the paper packaging. When components are removed from the paper, the VpCl<sup>®</sup> molecules naturally float away from the metal, leaving behind a dry and ready-to-use surface.

Cortec<sup>®</sup> VpCI<sup>®</sup> papers include special varieties such as VpCI<sup>®</sup> creped paper, reinforced paper, grease resistant paper, and ESD paper. In addition, our fully recyclable/repulpable moisture barrier papers offer excellent alternatives to polyethylene and wax papers. Paper coated with our water-based barrier coatings have displayed moisture barrier properties competitive to those of traditional wax or polyethylene coated moisture barrier papers, with the advantage of being more environmentally friendly and easier to dispose.







# VpCI® Papers Product Selection Guide

Product	Description	Availability
Cor-Pak <sup>®</sup> VpCl <sup>®</sup> Polycoat- ed Paper	Provides superior corrosion protection for both ferrous and non-ferrous metals. It is also coat- ed with a polyethylene coating to provide a moisture barrier and/or moisture-vapor barrier for extra protection of packaged metals.	Stock and custom rolls, custom sheets.
Cor-Pak <sup>®</sup> VpCl <sup>®</sup> Rein- forced Paper	Premium corrosion inhibiting white-tinted polycoated reinforced paper made from high quality neutral/natural kraft paper. It has excellent tear resistance and also offers a barrier to water, oil, and grease.	Stock and custom rolls.
CorShield <sup>®</sup> VpCl <sup>®</sup> -146	Neutral/natural kraft paper coated with Vapor phase Corrosion Inhibitors for superior corrosion protection of both ferrous and non-ferrous metals. It is excellent for single item packaging, interleaving, shipping tube end closures, or sheet liners. Fully recyclable/repulpable.	Stock and custom rolls, sheets, and perforated rolls.
CorShield <sup>®</sup> VpCl <sup>®</sup> -146 Creped Paper	CorShield <sup>®</sup> VpCl <sup>®</sup> -146 Creped Paper is premium corrosion inhibiting creped paper that offers a cushioning effect to physically protect delicate parts. Fully recyclable/repulpable.	Stock and custom rolls.
CorShield® VpCl®-146 Re- inforced Paper powered by Nano VpCl®	Premium corrosion inhibiting reinforced paper made from neutral/natural kraft paper. It has excellent tear resistance. CorShield <sup>®</sup> VpCl <sup>®</sup> -146 Reinforced Paper is effective against aggressive environments including humidity, SO <sub>2</sub> , and H <sub>2</sub> S.	Stock and custom rolls.
EcoShield® VpCI®-144	Premium environmentally friendly moisture barrier corrosion inhibiting paper provides superi- or corrosion protection for ferrous and non-ferrous metals and shows excellent oil and grease resistance. Coated with a water-based barrier coating. A competitive fully recyclable/repulpable alternative to polyethylene and wax paper.	Stock and custom rolls, custom sheets.
EcoShield® VpCI®-144 Super Barrier	A high gloss version of EcoShield <sup>®</sup> VpCl <sup>®</sup> -144. In addition to its corrosion inhibiting properties, this paper's shiny moisture-barrier side offers increased water resistance by reducing the paper's water vapor transfer rate. An excellent recyclable alternative to typical polycoated and waxed papers.	Stock and custom rolls, custom sheets.
EcoSonic® ESD Paper powered by Nano VpCl®	Combines corrosion inhibiting and static-dissipative properties. Eliminates static electricity buildup through the use of an environmentally friendly coating made from soybean oil. Performs better on the static half-life test than papers with conventional anti-stat coatings. Fully recyclable/repulpable.	Custom rolls and sheets.
VpCI®-148 Paper	An improved grease resistant corrosion inhibiting paper. Unlike wax or polycoated papers, which contribute to environmental problems, VpCl®-148 contains a biobased barrier coating and is fully recyclable/repulpable. An excellent eco-friendly alternative to traditional grease resistant papers.	Custom rolls and perforated rolls.
VpCl®-149	VpCl <sup>®</sup> -149 is a unique corrosion inhibiting paper for the protection of a wide variety of metals. Formulated to provide extra protection to sensitive metals such as copper, aluminum, and cast iron. Fully recyclable/repulpable.	Custom rolls, perforated rolls, and sheets.
Cortec® VpCl® Paper is available in weights ranging from 30-100 lbs/3000 ft²(55-163 g/m²)		



# VpCI<sup>®</sup> Emitters

VpCl<sup>®</sup> emitters provide an extra dose of Vapor phase Corrosion Inhibitors for small or large packages needing additional protection against corrosion during shipping or storage. By inserting one of the many different styles and sizes of VpCl<sup>®</sup> emitters into your VpCl<sup>®</sup> packaging system, users can ensure that small and large spaces are saturated with a protective corrosion inhibiting environment. For especially sensitive items that will be undergoing extremely harsh conditions, such as those on an oceangoing vessel or in an open yard, using a VpCl<sup>®</sup> emitter serves as extra security against the corrosion that threatens to degrade the value of metal goods and assets—from small freshly manufactured components to large equipment ready for lay-up.

VpCl<sup>®</sup> emitters take many different forms and are dosed based on the volume of space that they are calculated to effectively protect. Sometimes all that is needed is to insert a Cor-Pak<sup>®</sup> Tablet or 1-MUL Pouch to protect a space of 1 cubic foot (28 L) or less. At other times, an EcoPouch<sup>®</sup> or Bio-Pad<sup>®</sup> roll may be needed to protect several dozen cubic feet (several cubic meters) of space. Self-stick VpCl<sup>®</sup> emitter cups are another convenient way to include long-lasting VpCl<sup>®</sup> protection, for example, in the shipment of electrical or electronic cabinets.

VpCl<sup>®</sup> emitters release Vapor phase Corrosion Inhibitors that travel through the air space, forming an invisible protective shield on all accessible metal surfaces inside the enclosed package. This VpCl<sup>®</sup> shield does not alter metal properties. Instead, it blocks the ability of oxygen, moisture, and other corrosive elements to attack the metal surface and make it rust. After the metal part is taken out of the package, the VpCl<sup>®</sup> molecules float away, and the metal components, machinery, or products are ready for immediate use, no cleaning or degreasing required.







# VpCI® Emitters Product Selection Guide

Product	Description	Availability	
	Small Package Emitters		
Cor-Pak <sup>®</sup> 1-MUL Pouches	Provides efficient protection for ferrous and non-ferrous materials within a package. The VpCI® vaporizes and then condenses on all metal surfaces protecting all areas of the metal product. Each Cor-Pak® 1-MUL Pouch protects up to 1 cubic foot (28 L).	Stock: 2.50" x 2.75" x 0.06" (5.7 cm x 5.1 cm x 0.15 cm)	
Cor-Pak® Tablets	An extremely efficient dry method of protecting metals within a package. Using Vapor phase Corrosion Inhibitor Technology, these easy-to-use tablets provide up to 24 months of corrosion protection for ferrous and non-ferrous metals. They are nitrite, phosphate, and silicate free. Protects up to 1 cubic foot (28 L).	Stock: 1,000 tablets per bottle 4 bottles per carton 9.2 lbs (4.17 kg) per carton	
VpCI®-101 Device	Designed to provide corrosion protection for metal components and parts enclosed in non-ven- tilated control boxes, cabinets, or tool boxes. A VpCI®-101 device protects up to 1 cubic foot (28 L) in volume. These self-adhesive devices are simple and convenient to install.	Stock: 3" x 1 .25" x 0.25" (7.6 cm x 3.2 cm x 0.6cm)	
VpCI®-143 Paper Emitters	Fully recyclable/repulpable neutral/natural kraft linerboard squares coated with VpCI® coating on two sides for fast Vapor phase Corrosion Inhibitor protection of ferrous and non-ferrous metals. Insert approximately one 1 x 1 inch (6.45 cm <sup>2</sup> ) emitter into package for every 25 cubic inches (410 cm <sup>3</sup> ) of void space needing protection.	Stock: 1" x 1" (2.54 cm x 2.54 cm) Custom: 1-52" x 1-56" (2.54-132 cm x 2.54-142 cm)	
	Large Volume Emitters		
BioEmitter®	A biobased pad that emits Vapor phase Corrosion Inhibitors out of a vented cardboard box. An easy way to protect valuable multi-metal components or parts in an enclosed space up to 50 cubic feet (1.4 m <sup>3</sup> ).	Custom order product. Contact your regional sales representative for sizing and lead times.	
EcoPouch®	EcoPouch <sup>®</sup> contains VpCl <sup>®</sup> -609 powder for corrosion protection of ferrous metals. Insert into packages or metal powder drums as an extra-strength source of VpCl <sup>®</sup> for protection of large volumes (protects up to 35.3 cubic feet [1 m <sup>3</sup> ]). Not for use with yellow metals.	Stock 6" x 10" x 0.5" (15.3 cm x 25.4 cm x 1.3 cm) pouch- es, 50 per carton.	
VpCI®-308 Pouch	Contains VpCl <sup>®</sup> -308 powder for corrosion protection of ferrous and yellow metals. Insert into packaging as an extra-strength source of VpCl <sup>®</sup> for protection of large volumes (protects up to 35.3 cubic feet [1 m <sup>3</sup> ]). Each pouch is 6" x 10" x 0.5" (15.3 cm x 25.4 cm x 1.3 cm).		
VpCI®-309 Pouch	Contains VpCI <sup>®</sup> -309 powder for corrosion protection of ferrous metals. Not aggressive to yellow metals. Insert into packaging as an extra-strength source of VpCI <sup>®</sup> for protection of large volumes (protects up to 35.3 cubic feet [1 m <sup>3</sup> ]). Each pouch is 6" x 10" x 0.5" (15.3 cm x 25.4 cm x 1.3 cm).	Made to order 6" x 10" x 0.5" (15.3 cm x 25.4 cm x 1.3 cm) pouch- es, 50 per carton.	
	Flexible Emitters		
Bio-Pad®	A flexible corrosion inhibiting device constructed from biobased non-woven material. It pro- vides an extra-strength source of VpCI <sup>®</sup> for corrosion protection of large volumes. Bio-Pad <sup>®</sup> 2" x 6" protects up to 1.5 cubic feet (42 L) per unit. Bio-Pad <sup>®</sup> 8" x 8" protects up to 8 cubic feet (0.23 m <sup>3</sup> ) per unit. Bio-Pad <sup>®</sup> roll protects up to 15 ft <sup>3</sup> per ft <sup>2</sup> of material (4.5 m <sup>3</sup> /m <sup>2</sup> ).	2" x 6" (5 cm x 15.24 cm), 8" x 8" (20.32 cm x 20.32 cm), and custom rolls.	
VpCI <sup>®</sup> -130 Series	VpCI®-130 Series foam is a unique flexible packaging material that combines VpCI® protection, desiccant action, and antistatic capabilities in one product. Metal parts packaged with VpCI®-130 Series foam receive continuous protection from the corrosive effects of humidity, condensation, aggressive industrial atmospheres, dissimilar metal corrosion, and salt air.	Various stock sizes.	
	Emitter Cups		
VpCl®-105 Emitter	Cortec <sup>®</sup> VpCl <sup>®</sup> -105 emitters are unique devices designed to provide corrosion protection for metal components and parts enclosed in non-ventilated control boxes, cabinets, or tool boxes up to 5 cubic feet (0.14 m <sup>3</sup> ).	Stock: 2.25" x 0.75" (5.7 cm x 1.9 cm)	
VpCI®-111 Emitter	VpCl <sup>®</sup> -111 emitters are unique devices designed to provide corrosion protection for metal components and parts enclosed in non-ventilated control boxes, cabinets, or tool boxes up to 11 cubic feet (0.31 m <sup>3</sup> ).	Stock: 2.25"" x 1.25" (5.7 cm x 3.2 cm).	
	Emitter Strips		
CorroLogic® Tube Strips powered by Nano VpCl®	CorroLogic <sup>®</sup> Tube Strips powered by Nano VpCl <sup>®</sup> make it possible to protect the interior of a tube or pipe against corrosion without expensive internal coatings. The flexible strips have a 1/3 inch diameter (8.5 mm). They are extruded from low density polyethylene containing a proprietary VpCl <sup>®</sup> compound designed for protection of ferrous and non-ferrous metals and alloys. Strips should be cut to length and placed inside the pipes or tubes, which are then capped to trap the protective vapors inside. Not recommended for pipe diameters greater than 6 inches (15.2 cm).	Stock: 1/3" x 500' (0.84 cm x 152.4 m)	
VpCI®-150 Adhesive Backed Foam Tape	VpCl®-150 foam tape protects metal in enclosed spaces from corrosion. These unique tapes also provide antistatic protection. Protects 0.4 cubic feet (11.3 L) per linear inch (2.5 cm).	Stock rolls: 12' x 0.75" x 0.25" (3.7 m x 1.9 m x 0.6 cm)	
VpCl®-170 Adhesive Backed Foam Tape	VpCl <sup>®</sup> -170 foam tape protects metal in enclosed spaces from corrosion. These unique tapes also provide antistatic protection. Protects 1 cubic foot (28.3 L) per linear inch (2.5 cm).	Stock: 20' x 2" x 0.25" (6.1 m x 5.1 cm x 0.6 cm)	



# **Specialty Products**

Cortec's specialty products include unique packaging items that incorporate Vapor phase Corrosion Inhibitors into protective fabric, corrugated boxes, laminated barrier foil, pipe caps, woven polypropylene, and more for customized protection. These protective items can be adapted to use for uniquely shaped items or special packaging, storage, and transport circumstances.

Cortec<sup>®</sup> also offers specialty packaging material for non-corrosive situations. Selections include water soluble film pouches, fully repulpable heat sealable paper, and comercially compostable film. In addition, our fully recyclable/repulpable moisture barrier papers offer excellent alternatives to polyethylene and wax papers. Paper coated with our water-based barrier coatings have displayed moisture barrier properties competitive to those of wax or polyethylene coated papers, with the advantage of being more environmentally friendly and easier to dispose.

Browse our specialty products to find the right solution for your unique circumstance.







# Specialty Products Selection Guide

Product	Description	Availability
	Absorbents	
Corrosorber®	Corrosorber <sup>®</sup> cup absorbs hydrogen sulfide and other corrosive gases. It will not interfere with VpCI <sup>®</sup> protection but will instead absorb the gases that cause corrosion.	Stock: 2.3" x 1.25" (5.8 cm x 3.2 cm)
Corrosorber <sup>®</sup> Pouch	A uniquely designed pouch containing an indicating powder that absorbs corrosive sulfurous gases such as hydrogen sulfide and volatile mercaptans.	Contact your regional sales representative for cus- tom sizes and lead time.
Desicorr <sup>®</sup> Pouches/NW	A specially designed pouch to protect products from moisture damage. Available in windowed (indicator spheres change from yellow to green when desiccant is spent) or non-windowed versions (NW).	Made to order: 2.75" x 2.5" x 0.125" (7 cm x 6.4 cm x 0.3 cm); 4" x 7" x 0.125"(10.1 cm x 17.8 cm x 0.3 cm)
Desicorr <sup>®</sup> VpCI <sup>®</sup> Pouches/ NW	A specially designed two-sided pouch containing a unique combination of desiccant and Vapor phase Corrosion Inhibitors (VpCI <sup>®</sup> ). Available in windowed (indicator spheres change from yellow to green when desiccant is spent) or non-windowed versions (NW).	Stock and made to order: 2.75" x 2.5" x 0.125" (7 cm x 6.4 cm x 0.3 cm); 4" x 7" x 0.125" (10.1 cm x 17.8 cm x 0.3 cm)
	EcoFilms	
Eco Film®	A certified compostable film designed to replace traditional films such as low density and high density polyethylene. BPI certified compostable (BPI #890974) for commercial composting environments per ASTM D6400 (where these facilities exist).	Made to order: 15 gallon (57 L), 33 gallon (125 L), and 65 gallon bags (246 L). Contact your regional sales representative for custom sizes and lead time.
Eco Works®	A range of commercially compostable film and bag products containing 10% or 30% renewable content and no polyethylene. BPI certified compostable (BPI #890974) for commercial composting environments per ASTM D6400 (where these facilities exist).	Custom sheeting, tubing, and bags. Contact your re- gional sales representative for sizing and lead time.
Eco Works® Resin	A proprietary blend of aliphatic and aromatic polyesters designed for com- postable film extrusion applications. BPI certified compostable (BPI #890974) for commercial composting environments per ASTM D6400 (where these facilities exist). Resin also contains an annually renewable biopolymer. Films produced from Eco Works <sup>®</sup> Resin can be certified compostable per ASTM D6400/EN 13432.	Compounded Eco Works <sup>®</sup> 10-30 upon request, 800 lbs (363 kg) minimum. Contact your regional sales representative for sizing and lead time.
Eco-Corr Film®	The first compostable corrosion inhibiting film. Eco-Corr Film® can be made with or without biobased content and is compliant to ASTM D6400 specifications for composting in municipal and industrial composting facilities (where these facilities exist).	Available in custom sheeting, tubing, and bags. Contact your regional sales representative for sizing and lead time.
EcoOcean®	Biobased, compostable film and bags designed not to pollute marine environments, natural soil and water environments, backyard composting systems, and municipal composting facilities (in areas where these facilities are available).	Contact your regional sales representative for cus- tom sizing and lead times.
EcoSol®	EcoSol® is a water soluble, polyvinyl alcohol (PVOH) film ideally suited for many packaging applications. Water soluble PVOH bags, sachets, or pouches created from this film provide a convenient, safe, and economical delivery system for a wide range of products.	Custom sheeting (9"-17" [23-43 cm]) and custom tub- ing (9"-19" [23-48 cm]) only. Contact your regional sales representative for sizing and lead time.
	Boxes	
CorrTainer®	CorrTainer <sup>®</sup> is a brand of corrugated boxes coated on the inside with Vapor phase Corrosion Inhibitors that integrates safe multi-metal corrosion protec- tion. Fully recyclable and repulpable.	Custom order product. Contact your regional sales representative for sizing and lead times.
	Eco Emitters	
EcoDevice®	A unique biobased VpCI <sup>®</sup> emitting device constructed from biobased non-woven material. Adhesive backing. Protects up to 1.5 cubic feet (42 L) of space.	Custom order product. Contact your regional sales representative for lead times.
EcoEmitter®	Self-stick polymeric cup constructed from biobased resins contains corro- sion inhibiting powder that releases protective vapors through a breathable biobased membrane.	Custom order product. Contact your regional sales representative for sizing and lead times.
	Fabric	
Cor-Pak <sup>®</sup> Fabric LD	Cor-Pak <sup>®</sup> Fabric LD is a strong wet laid nonwoven fabric composed of a com- bination of synthetic and cellulosic fibers and enhanced with Cortec's Vapor phase Corrosion Inhibitor Technology.	Custom sizes: 2-90" x 50-26,000' (5-228.6 cm x 15.24- 7925 m); Diameter: 56" (142.2 cm); Core size: 3", 4", 5", 6" (7.62, 10.16, 12.7, 15.24 cm)
CorShield <sup>®</sup> Fabric	CorShield <sup>®</sup> is a multiple-layered protective fabric with a non-woven, soft inside layer. CorShield <sup>®</sup> Fabric is made from low-density polyethylene tapes, a high-density coating, and a non-woven laminate on the inside.	Stock: 68" x 500' (172.7 cm x 152.4 m)
EcoShield® Fabric	Woven polyethylene fabric with a non-woven inner layer. Protects equipment while offering VpCI <sup>®</sup> multi-metal corrosion protection. Available with zippers and in custom sizes.	Custom order product. Contact your regional sales representative for sizing and lead times.
EcoWeave®	EcoWeave <sup>®</sup> is a woven polypropylene sheeting enhanced with Vapor phase Corrosion Inhibitors. EcoWeave <sup>®</sup> offers extra strength, durability, corrosion protection, reusability, and recyclability.	Stock and custom rolls. Contact your regional sales representative for sizing and lead times.

Heat Sealable Paper		
EcoShield® Heat Sealable Paper	EcoShield <sup>®</sup> Heat Sealable Paper is a fully repulpable and readily recyclable packaging product coated with a water based heat sealable adhesive coating.	Stock and custom rolls. Perforation available.
	Heavy Duty Sheeting	
Cor-Pak <sup>®</sup> VpCI <sup>®</sup> Corrugated PE Sheeting	Reusable corrugated high-density polyethylene (PE) corrosion protection sheeting with cushioning characteristics. Fully recyclable.	Custom sizes—minimum 16" x 16" (40.6 cm x 40.6 cm). Contact your regional sales representative for sizing and lead times.
	Laminated Film	
CorrLam <sup>®</sup> LD VpCI <sup>®</sup> Barrier Laminate	A multilayered laminate structure of clear polyester extrusion coating, alu- minum foil, and VpCl®-126 film. Developed to provide an excellent barrier to water vapor, gas, ultraviolet light, and odor.	Custom order product. Contact your regional sales representative for sizing and lead times.
	Linerboard	
Anti-Skid Linerboard/VpCl® Anti-Skid Linerboard	Cortec <sup>®</sup> Anti-Skid Linerboard is available in two varieties, with and without VpCl <sup>®</sup> protection, for applications where non-movement of items is critical. Recyclable, repulpable.	Custom sizes: 2-98" x 50-25,000' (5-248.9 cm x 15.24- 7620 m); Diameter: 56" (142.2 cm); Core size: 3", 4", 5",6" (7.62, 10.16, 12.7, 15.24 cm)
Cor-Pak <sup>®</sup> Linerboard	Premium corrosion inhibiting linerboard that provides superior corrosion protection for both ferrous and non-ferrous metals.	Custom sizes: 2-98" x 50-25,000' (5-248.9 cm x 15.24- 7620 m); Diameter: 56" (142.2 cm); Core size: 3", 4", 5",6" (7.62, 10.16, 12.7, 15.24 cm)
EcoShield® Paper and Linerboard	EcoShield <sup>®</sup> Paper and Linerboard are packaging products coated with a water-based barrier coating. Fully repulpable competitive alternatives to wax or polyethylene coated paper or linerboard.	Custom rolls, perforated rolls, and sheets. Contact your regional sales representative for sizing and lead times.
	Moisture Barriers	
EcoShield <sup>®</sup> Barrier Coating for Paper and Corrugated	EcoShield <sup>®</sup> Barrier Coating is a water borne barrier coating that is recyclable and 100% repulpable, offering a competitive environmentally friendly alter- native to traditional wax and polyethylene papers.	Custom order product. Contact your regional sales representative for sizing and lead times.
EcoShield® Super Barrier Paper	EcoShield <sup>®</sup> Super Barrier Paper is made with a water-based barrier coating that creates an environmentally acceptable fully recyclable and repulpable replacement for polycoated and wax papers.	Custom rolls and sheets. Contact your regional sales representative for sizing and lead times.
EcoShield® VpCI® Liner- board	EcoShield® VpCI® Linerboard is a unique product that combines Cortec's field proven Vapor phase Corrosion Inhibitors with a moisture barrier coating. Use for interleaving or form into boxes.	Custom sizes: 2-98" x 50-25,000' (5-249 cm x 15-7620 m);Diameter: 56" (142 cm); Core size: 3", 4", 5", 6" (7.6, 10.16, 12.7, 15.24 cm)
	Pipe Caps	
CorroLogic <sup>®</sup> CorrCaps™ powered by Nano VpCI <sup>®</sup>	Heavy wall black polyethylene caps that protect pipe threads, pipe ends, and other tubular objects from corrosion, mechanical damage, and contamina- tion.	Custom order product. Contact your regional sales representative for sizing and lead times.
CorrCap VpCl <sup>®</sup> Protective Cover	"Shower cap style" proctective cover made from VpCI®-126 film. Place on ends of electrical connectors, engines, brakes, pipes, or other exposed metal parts for corrosion protection. Recyclable.	Custom order product. Contact your regional sales representative for sizing and lead times.



## Quality Management System (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.

# (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.

#### Laboratory Accreditation (ISO/IEC 17025)



Cortec® Laboratories, Inc. is the only lab in our industry that has received ISO/IEC 17025 Certification, which ensures quality in recording and reporting data, as well as calibrating equipment within the laboratory.



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