VpCI® Electrical & Electronic Products

for the protection of electronics,
enclosures, instrumentation,
controls, and O.E.M. applications.

CORTEC CORPORATION
Environmentally Safe VpCI®/MCI® Technologies
Cortec® VpCI® Electrical & Electronic Products

Value-Added Features:

Cortec® VpCI® Emitting Systems
Cortec® offers a complete full-service line of products in convenient-to-use sizes. Cortec® products are an excellent quality assurance tool for everything from major manufacturers of electronics to do-it-yourself home-built kits. Corrosion can be stopped at any step from manufacturing to final installation. Integrate all your electronic/electrical protection needs from a single source supplier.

Cortec® Emitting Systems Offer — Reliability, Service Life, and Cost Reduction.
Corrosion of complex electrical and electronic equipment is an increasingly serious problem causing expensive failures. Corrosion occurs during manufacturing, shipping, storage, and field operations. It can be caused by:

• Salt, moisture, contaminants, hydrogen sulfide, sulfur dioxide, ammonia, or acid rain
• Galvanically-induced attack
• Equipment operation in non-controlled atmospheres

With Cortec® Emitting Systems, sensitive equipment is protected against corrosion, thereby extending its life and reducing the cost of expensive repairs.

How Cortec® VpCI® Emitters protect your equipment.
Emitters and tapes are designed to protect products, components, or parts against corrosion when enclosed in non-ventilated housings, control boxes or other enclosures. The VpCI® Emitter releases a vapor into the interior of the package, the vapor then deposits on the metal surfaces and forms a protective molecular layer. This layer of VpCI® provides multimetal protection and helps reduce corrosion in the enclosure.

Cortec® products are environmentally friendly.
Many toxic materials such as lead, chromium, cadmium, nickel, and zinc are presently being used by electronics manufacturers to avoid the effects of corrosion. Cortec® products prevent corrosion while being non-toxic, safe to handle and apply, and free of nitrites and silicones. They allow manufacturers to develop environmentally friendly “green” products by using fewer toxic materials.

EMITTERS

VpCI®-101 Device Patented
• Patented VpCI® impregnated foam
• Continuous corrosion protection for 1 cubic foot of enclosed space
• Non-toxic
• NSN# 6850-01-338-1392
• MIL-B-81705C
• USDA approved

VpCI®-105 Emitter, & VpCI®-111 Emitter Patented
• One way Tyveck release membrane.
• Nitrite, silicone and phosphate free.
• Economical and long lasting protection.
• VpCI®-105 protects 5 cubic feet, and VpCI®-111 protects 11 cubic feet of enclosed space.

Cortec® VpCI®-150 and VpCI®-170 Tape, Patented
• VpCI® impregnated foam tapes with adhesive backing.
• Corrosion protection lasts up to two years.
• NATO# 8030-00-244-1299, MIL-B-81075C, NSN 8030-01-208-1769
• USDA approved.
• USDA approved.

CORWIPE

Corwipe® 500 Patented
• Strong DuPont Sontara® wipe
• Cleaner/Degreaser
• Anti-Stat
• Removes surface rust
• Corrosion inhibitor for multimetals
• Disposable
PACKAGING

**Features**
- Provides continuous long-term corrosion protection
- Economical to apply
- Effective in polluted and humid atmospheres
- Non-toxic and safe to handle and apply
- Free of nitriles, silicones and phosphates
- The molecular VpCI® layer does not interfere with electrical, optical or mechanical surface properties
- Multimetal protection
- Adhesive backing allows fast, no-tool installation
- Does not require removal prior to start-up
- Protects during equipment operation
- No or surface preparation required
- Multifunctional protection: VpCI, static dissipating and desiccant ability
- Compact space-saving design suitable for OEM applications
- Low V.O.C. values; exceeds Southern California Clean Air Act and other local environmental requirements

**Benefits**
- Cost Reduction
- Reduced consumption
- Materials
- Labor
- Time
- Value Added Product/Service
- Peace of Mind During Shipping/Storage
- Less Periodic Maintenance
- Reduced Surface Preparation

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**Corrosorber®**
- Absorbs corrosive gases
- Irreversible reaction
- Non-toxic
- Superior performance against H2S
- Changes color as it is used up
- Quick installation

**ElectriCorr® VpCl®-238**
- Instant corrosion/oxidation protection
- No CFC’s
- Displaces moisture
- Anti-static
- 2 year indoor protection
- NSN# 6850-01-413-9361

**ElectriCorr® VpCl®-239**
- Excellent outdoor corrosion protection.
- Designed for aggressive environments.
- Non-conductive
- Anti-static
- Perfect for exposed contacts and relays.
- UV Indicator

**ElectriCorr® VpCl®-286**
- Conforms to surface
- Continuous corrosion protection
- Fast drying
- No VOC’s
- UV indicator
- Vibration resistant
- Extends board life

**ElectriCorr® VpCl®-248**
- Long-term corrosion protection
- Increased corrosion protection at a lower cost than conventional rust preventives
- Minimized field service
- Non-flammable

**Cortec’s Vapor Corrosion Inhibitor stands up to vigorous testing.**

This accelerated test method for rust protection in a humidity cabinet is used for evaluating the rust preventative properties of metal preservatives under conditions of high humidity.

One circuit board was left untreated in an enclosure while the other was treated with Cortec’s Vapor Corrosion Inhibitor protection. The criteria for passing or failing the test is the size and number of rust dots on the test surfaces.
### EcoEmitter® (EcoEarth®)
Unobtrusive emitting device filled with nitrite free VpCI®, for multifunctional protection. Constructed from biodegradable and renewable materials. Powered by new VpCI®.

<table>
<thead>
<tr>
<th>Protection</th>
<th>Packaging</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 ft³ (28.3 l)</td>
<td>10/carton</td>
<td>Operating, packaged and stored electrical equipment, marine navigation and communication equipment, aerospace electrical contacts, electric motors, switching equipment, field boxes, medical equipment, electrical winch, terminal boxes, scientific and measuring instruments, telecommunications equipment, control panels for manufacturing and processing equipment.</td>
</tr>
</tbody>
</table>

### Corpak® 1 MUL
Multifunctional pouch with VpCI®/desiccant action. 2.5” W x 2.5” H x 0.5” D (6.4 cm x 6.4 cm x 1.3 cm)

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<td>1.0 ft³ (28.3 l)</td>
<td>10/carton</td>
<td>Small offices, electronics, parts shipping, packaging, dustbins</td>
</tr>
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### Desicorr
A specially designed pouch to protect products from moisture damage. Whether in storage or in transit, products in nearly every industry require protection from moisture. Conforms to MIL-D-3464E, MIL-I-222110C, MIL-I-46446, and MIL-I-46471C Type I and Type II.

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<td>1.0 ft³ (28.3 l)</td>
<td>10/carton</td>
<td>For storage and/or packaging of sensitive electronic equipment for wrapping or inserting with packaging material.</td>
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### Corwipe® 500
Lint-free DuPont Sorbent wipes for cleaning and protecting equipment, tools and all raw and coated metals. Non-hazardous. Patented.

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<td>12 wipes per re-usable fold pouch 12 flat pouches per carton</td>
<td></td>
<td>Test equipment, computers, PC boards, aircraft and satellite components, audio and video equipment, power terminals, any sensitive raw or painted metal parts or equipment.</td>
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<td>6 cans/carton</td>
<td>20/carton</td>
<td>Manual or automatically insert a Desicorr pouch in the packaging. This number may vary depending on shipment conditions and the nature of the products being protected.</td>
</tr>
</tbody>
</table>

### ElectricCorr®
Multifunctional contact cleaner and multimetal corrosion inhibitor. 12 oz. (340 g) cans, drums. Conforms to MIL-D-46446, MIL-D-46471C, MIL-I-222110C, MIL-I-46446, MIL-I-46471C, Type I and Type II.

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<td>6 cans/carton</td>
<td>20/carton</td>
<td>Integrated circuitry, bus bars, electrical terminals</td>
</tr>
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### Corrosorber®
Cup axle for absorption of corrosive gases. 2.3” diameter x 1.27” H (5.8 cm diameter x 3.2 cm H)

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<tr>
<td>10.0 ft³ (280 L)</td>
<td>10/carton</td>
<td>Corrosorbers absorb hydrogen sulfide and other corrosive gases.</td>
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</table>

**LIMITED WARRANTY**

Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of Cortec Corporation. The foregoing warranty is exclusive and in lieu of all other warranties, express, implied or statutory, including without limitation any implied warranty of merchantability or of fitness for a particular purpose, in no case shall Cortec Corporation be liable for incidental or consequential damages. Cortec Corporation guarantees its products will be free from defects when shipped to customer. Any claim for defective products must be made within six months after shipment. The customer must notify Cortec Corporation of the claimed defect within six months after shipment. The customer shall note Cortec Corporation the claim of defect within six months after shipment if product to customer. All freight charges for replacement product shall be paid by customer. Corrosorber® Corporation shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products.