

The **LEADING** Edge

Cortec's Commitment to Quality, Excellence, and Leadership Shine Through With ISO/IEC 17025, ISO 9001:2008, and ISO 14001:2004 Recertifications!

Cortec® Corporation is committed to meeting and exceeding our customers' needs and requirements globally by continually improving product quality, customer service, environmental management systems, and laboratory practices. Cortec® is ISO/IEC 17025 accredited, ISO 9001:2008 certified, and ISO 14001:2004 certified without any non-conformances. Obtaining and maintaining these accreditations requires a significant investment of time and money. This investment is further evidence of Cortec's commitment to quality, excellence, and leadership in this industry. Cortec® strives to constantly improve our already strong quality and customer service.

Cortec® Corporation is the only company in the Volatile Corrosion Inhibitor (VCI) industry to have a laboratory that is ISO/IEC 17025 accredited. This year, Zaneta Popovska, performed an ISO/IEC 17025 external surveillance audit and recertified Cortec® Laboratories, Inc. without any non-conformances. The 17025 Standard covers all aspects of quality for testing laboratories including: testing procedures, test equipment calibration, method/instrument validation, training of chemists and lab technicians, and interpretation/reporting of test results. Accreditation is obtained through an independent organization (accreditation body) that audits Cortec's laboratory and certifies that we are in compliance with the standards. Cortec's laboratory has been accredited since September of 2010, and offers a variety of tests included under their scope. To maintain this accreditation, the laboratory is re-evaluated each year to ensure it continues to comply with the requirements and to check that it maintains the standards of operation. The laboratory is also required to participate in relevant proficiency testing programs between reassessments, as a further demonstration of technical competence. When our customers receive certified test reports from Cortec® Laboratories, Inc., they can be assured that those reports are accurate and unbiased.

Certified since 1994, Cortec® Corporation was one of the first companies to be ISO 9001 certified in Minnesota. This year, Van Knox performed an ISO 9001 external recertification audit and recertified Cortec® without any non-conformances. The International Organization for Standardization (ISO) is an independent company made up of 163 member countries and 3,368 technical bodies. The people involved in developing ISO standards are experts within the field that understand the needs of the industry. These experts work together to manage the standard of development based on economic, environmental, and societal dimensions. The ISO 9001:2008 management system requires that we demonstrate and maintain consistent production of quality products and continually improve our management systems to ensure that our clients receive the best products and services that we can offer. We



hold ourselves to a very high standard and our goal is the highest level of customer satisfaction possible; the ISO 9001 management system ensures that we are always working towards achieving it.

The National Quality Assurance, USA Inc. (NQA), the largest and most respected ISO registrars in the world, has also certified Cortec® as ISO 14001:2004 compliant since 1998. This year, Clayton Jenson performed an ISO 14001 external surveillance audit and recertified Cortec® without any non-conformances. ISO 14001:2004 provides Cortec® with the structure for effective EMS methods. Our Environmental Management System Committee and employee teamwork enables us to formulate and follow ISO 14001-compliant processes. It has ensured that the EMS maintains control of all of Cortec's activities that may have an impact on the environment, also allowing us to identify and modify or eliminate potentially environmentally harmful processes before they cause damage or injury. Now, in a time when stringent regulations are being developed and implemented to protect the environment on a daily basis, Cortec® has continued to develop products and procedures that benefit our world, providing a clean and safe environment for future generations.

The three recertifications without any non-conformances demonstrate Cortec's continuous dedication to constant improvement of a mature environmental management system backed by a strong and committed environmental policy, persistent development of quality and customer service, and maintaining a laboratory that is accurate and unbiased.

New Products

Cortec's BioEmitter™, Patent Pending Rust Blocker Shield

Cortec's BioEmitter™ offers easy-to-use protection from rust and corrosion on metals stored in enclosed spaces as large as 50 cubic feet (1.4m³). Simply attach the environmentally safe BioEmitter™ onto a clean surface inside an enclosed area, then relax knowing your tools, electric panels, or other metallic valuables are protected!

The BioEmitter™ takes up less than 1 square foot of space and is conveniently packaged in a vented cardboard box; allowing Cortec's innovative Vapor phase Corrosion Inhibitors (VpCIs) to migrate throughout the surrounding space to form an invisible molecular shield on metal surfaces, sealing off air and moisture - even in the hardest to reach areas. The BioEmitter™ provides long-term protection against corrosion even in the presence of adverse conditions including salt, moisture, airborne contaminants, H₂S, SO₂, NH₃, and others.

Cortec's BioEmitter™ is made with bio-based, renewable materials; the VpCIs are non-toxic and do not contain nitrates, silicones, phosphates, or heavy metals. They also have no adverse effects on electrical or chemical properties, and do not harm plastics, elastomers, or painted surfaces.

The BioEmitter™ protects a wide variety of metals from rust and corrosion. These metals include mild steel, galvanized steel, brass, solder, cast iron, silver, aluminum alloys, magnesium alloys, copper, and copper-nickel alloys.

Typical Applications:

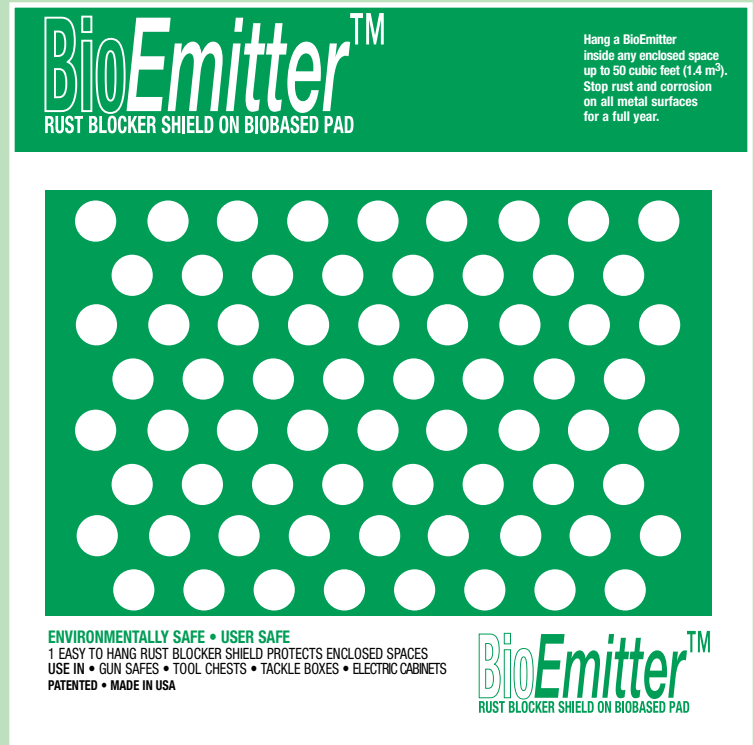
- Electrical cabinets
- Instrument cabinets
- Tool chests
- Storage lockers
- Trailers
- Gun safes
- RV storage holds
- Pool pump enclosures
- Boat storage cabinets
- Pick-up truck boxes
- Fishing tackle boxes

With its easy-to-use compact size and high bio-based content, the BioEmitter™ is convenient and safe to use. It is effective in polluted and humid environments and does not interfere with electrical, optical, or mechanical performance. It can be used in spaces larger than 50 cubic feet by simply hanging multiple BioEmitters in opposite corners of the area you need protected.

Cortec® BioEmitter™ meets NACE Standard TM0208-2008.

For more information on innovative corrosion protection products from Cortec®, please visit our website at:

<http://www.cortecvci.com/Products/products.php>



The image shows the BioEmitter product packaging and a grid of BioEmitters. The packaging is a green cardboard box with the BioEmitter logo and text: "BioEmitter™ RUST BLOCKER SHIELD ON BIOBASED PAD". A small text box on the right side of the box says: "Hang a BioEmitter inside any enclosed space up to 50 cubic feet (1.4 m³). Stop rust and corrosion on all metal surfaces for a full year." Below the box is a grid of 10x10 white circular BioEmitters on a green background. At the bottom of the grid, there is text: "ENVIRONMENTALLY SAFE • USER SAFE 1 EASY TO HANG RUST BLOCKER SHIELD PROTECTS ENCLOSED SPACES USE IN • GUN SAFES • TOOL CHESTS • TACKLE BOXES • ELECTRIC CABINETS PATENTED • MADE IN USA". To the right of the grid is the BioEmitter logo and text: "BioEmitter™ RUST BLOCKER SHIELD ON BIOBASED PAD".

CorShield® VpCI®-146 Creped Paper

Cortec® values our clients' well-crafted products and continues to create corrosion protection solutions to protect these assets. With this in mind, Cortec® introduces CorShield® VpCI®-146 Creped Paper powered by Nano VpCI® - a premium corrosion inhibiting paper that is environmentally safe, non-toxic, biodegradable, and does not contain nitrites, phosphates, or silicates. CorShield® VpCI®-146 Creped Paper utilizes Cortec's patented Vapor phase Corrosion Inhibiting (VpCI®) technology to provide a revolutionary way to protect metals in enclosed packages.

CorShield® VpCI®-146 Creped Paper is made from the highest quality Neutral Natural Kraft (NNK) paper without any chemical bleaching and is fully recyclable and repulpable. Without any chemical concentrations to calculate or a chemical tank or application system to maintain, CorShield® VpCI®-146 Creped Paper is easy to use. Once a product is wrapped in the creped paper, the VpCI® technology goes to work to protect it from corrosion while the structure of the paper provides protection from damage during transportation by delicately cradling the product.

The VpCI® coating on the creped paper vaporizes to reach all metal surface areas and provides complete corrosion protection. The unique Cortec® VpCI's form a very thin and effective protective layer that does not alter the appearance of products or require removal before further processing or use. The protective layer does not influence properties of most sensitive electrical parts, including conductivity and resistance. Parts protected with CorShield® VpCI®-146 Creped Paper can be painted, welded, and soldered.

Continued on next page...

New Products

This biobased, sustainable, and renewable Creped Paper can be used to protect products for storage and shipment in a variety of ways: single item packaging, interleaving, end closures for shipping tubes, inserting strips for recessed areas in large packages, and as sheet liners or separators between products. It is particularly suitable for the bearing industry as CorShield® VpCI®-146 Creped Paper offers cushioning, multimetal corrosion protection, and causes the “pooling” effect for RP oils. CorShield® VpCI®-146 Creped Paper protects carbon steel, stainless steel, galvanized steel, cast iron, aluminum alloys, copper, brass, and solder.

Applications include:

- Bearing Protection During Storage and Shipment
- Metal Producing: Coils, Wire Reels, Plate, Bar, Etc.
- Metal Forging and Die Casting: Raw and Machined Forgings and Castings
- Metalworking: Stamping, Sheet Metal Work, Springs, Bearings, Fasteners, Tube, Pipe, Nails, Etc.
- Finished Products: Engines, Machinery, Equipment, Tools, Hardware, Appliances,
- Instruments, Motors, Etc.
- Electrical and Electronic Components, Controls, Etc.

Cortec's CorShield® VpCI®-146 Creped Paper conforms to NACE Standard RP0487-2000 and is RoHS compliant.



Now Available

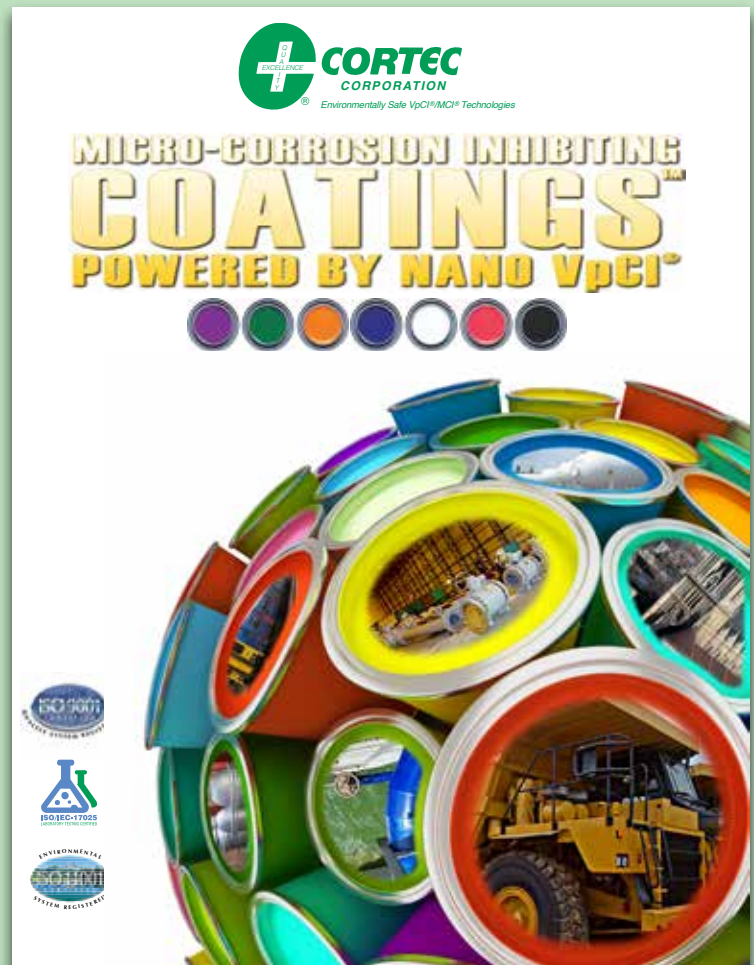
New Brochure on Micro-Corrosion Inhibiting Coatings™ Powered by Nano VpCI®

Cortec's new brochure features safe, easy-to-use, cost-effective coatings for a wide variety of corrosion problems in the harshest environments on land or sea. Corrosion creates staggering economic losses from deteriorating products that must be repaired, scrapped, sold at a reduced rate, or returned with extra freight costs. Such decreased productivity can approach 5% loss of total profit.

The brochure compares the technology of Cortec® Micro-Corrosion Inhibiting Coatings to traditional coatings which lack effective corrosion protection due to the large molecule sizes of sacrificial metal inhibitors (zinc, chromate, aluminum). These produce gaps in the coating and allow micro-corrosion to start. Cortec® Vapor phase Corrosion Inhibitor (VpCI®) coatings offer innovative, reliable protection with a continuous, self-replenishing shield that is environmentally friendly and easy to apply.

VpCI® products work by conditioning enclosed atmospheres with a protective vapor that condenses on all metal surfaces. Vapor ions dissolve and are attracted to metal surfaces, forming a thin molecular protective layer. The barrier continually re-heals and self-replenishes through further vapor condensation. This technology can be combined with coatings or other antistatic, lubricating, cleaning, paint removing, desiccant, polymeric, rust removing, and fire retarding properties for greater versatility.

The brochure highlights Cortec's line of exceptional removable coatings ranging from long term indoor storage protection to preservation of metal structures in harsh salt-spray conditions outdoors. These products are safer and more advanced than hazardous oil-based coatings. Removable coatings leave a translucent, waxy layer that is very efficient in SO₂ and H₂S environments and cleans off easily. These coatings are the best solution on the market for multiple uses: equipment lay-up, parts processing protection, overseas shipping, maintenance repairs, and parts storage.



Continued on next page...

Permanent coatings come in a variety of standard or customized colors with excellent UV resistance and gloss retention. Before and after photos show how Cortec® coatings can be used for long term metal protection even in conditions where sand and water blasting are prohibited. These coatings are effective under: humidity, saltwater, oxidizing atmospheres, corrosive industrial, marine, and tropical environments.

Tables in the brochure display product characteristics to help you select the coating that best fits your system and exposure needs. Cortec® is also ready to offer expert technical advice to tailor the right application to your corrosion sensitive products.

By aiming for the highest technical and intelligent solutions to protect your assets, Cortec® is able to provide exceptional corrosion resistance for reduced environmental impact globally.

To learn more about Cortec's innovative coatings, please see the full brochure at the following link: <http://www.cortecvci.com/Publications/Brochures/Coatings-Brochure.pdf>

Coming Soon

VpCI®-372 (*Improved*)

VpCI®-372 is a dry film temporary coating that protects parts and equipment from atmospheric corrosion as well as physical nicks, abrasions, and scratches. The water-based milky white liquid can be applied by spray, brush, roll, or dip. When it is time to access equipment, the dry temporary coating can be easily peeled away from the surface to uncover a clean, ready-to-use substrate.

With the new and improved formula, the film of VpCI®-372 coating stays pliable and becomes easier to peel. Past users of VpCI®-372 may have encountered the difficulty of the coating becoming brittle and difficult to strip. Cortec's updated formula solves this problem with an improved coating that is easily strippable.

VpCI®-372 is VOC compliant and can be disposed of as solid waste. It is fast drying, requires no solvents or special equipment to remove, and leaves behind an uncontaminated surface. VpCI®-372 inhibits corrosion on multiple metals, and it can be applied to some plastics (removability testing is suggested for each plastic).

VpCI®-329 D ES

VpCI®-329 DE S is a new easy spray version of VpCI®-329 D. While VpCI®-329 D provides excellent rust prevention for metals in indoor and outdoor sheltered conditions, its oil-based carrier makes it difficult to spray. VpCI®-329 D ES allows VpCI®-329 D to be easily sprayed from a handheld trigger spray bottle. It offers a convenient way to protect gears, spindles, coils, or any other metal parts that require a light coat of oil for further processing and shipment.

VpCI®-329 D ES contains the same inhibitors as VpCI®-329 D. Its carrier is a combination of bio-based oil and mineral spirits. The corrosion-inhibiting coating performs effectively even under the adverse conditions of 100% relative humidity and in the presence of such corrosive species as chlorides, hydrogen sulfide, or other sulfur compounds. It is thermally stable, providing long-lasting contact and vapor phase corrosion protection for a wider variety of applications.

EcoFog® VpCI®-309 Nano™, and EcoFog® VpCI®-609 Nano™, Patents Pending

EcoFog® VpCI®-309 Nano™, and EcoFog® VpCI®-609 Nano™ are our VpCI®-309 and 609 powders in much smaller particle sizes. They are particularly designed for corrosion protection of ferrous metals in hard-to-reach recessed areas, interior cavities, and voids. Their tiny particle sizes allow for quicker diffusion and more effective protection of inaccessible and recessed metal surfaces.

Nano powders have faster vapor phase protection capability and improved fogging distance. They are handy tools in the protection of valuable infrastructural assets.



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