

# BioCORTEC® NEWSLETTER

April 2018



## Cortec® to Share Sustainable Solutions at “International Conference on Bio-Based Materials”

Cortec® Corporation is eager to share sustainable corrosion protection and biological cleanup solutions at the 11<sup>th</sup> International Conference on Bio-Based Materials, taking place May 15<sup>th</sup>-16<sup>th</sup> in Maternushaus, Cologne, Germany! The joint Cortec®/EcoCortec®/Bionetix® booth will feature information on a broad range of biobased and/or biodegradable corrosion control options from Cortec®/EcoCortec®, along with biological cleaning and waste treatment selections from Bionetix® International.

At the event, Cortec® will be introducing its freshly updated BioCortec® brochure. The new brochure presents Cortec's growing portfolio of biobased and/or biodegradable products, with a special focus on its expanding line of USDA Certified Biobased Products. The BioCortec® brochure includes a wide range of corrosion control products—from rust preventatives, cleaners, and rust removers to corrosion-inhibiting biodegradable film, ESD paper, concrete admixtures, and hydrostatic testing treatment.

Stop by Booth #18 next month to learn more about Cortec's sustainable options!



## Cortec® Biotechnology Campus Implements ISO 9001:2015 Quality Management System

Quality of products and services is an important goal at Cortec®. Consequently, Cortec® Corporation invests many resources into its ISO 9001 Quality Management System (QMS) certification. Currently, Cortec® is diligently working to extend this ISO certification to Cortec® Biotechnology Campus (CBC) in Sarasota, Florida, which is involved in the manufacture of water-based coatings and biobased MCI® concrete admixtures..

Working toward ISO 9001:2015 certification is a strenuous task with many steps. The month of March saw a major milestone as Cortec's Director of Quality and Safety spent a week and a half doing training and implementation of the new quality standard at CBC. The next steps in the process will be to do an internal audit and review, followed by an external audit and certification through an independent ISO 9001 registrar. Once the external audit is completed and requirements have been fulfilled, certification will be granted!



## Biobased MCI®-2005 Admixture Raises Seawall Service Life Prediction to 150+ Years

A property owner on Longboat Key, just off the Gulf Coast of Florida, wanted to build a seawall with a minimum service life of 100 years. This is a challenge in normal circumstances and even more so in a corrosive subtropical seawater environment. However, the owner was confident that he could achieve this goal through the use of MCI®-2005 admixture.

When choosing the mix design, a standard seawall mix was entered into LIFE-365 independent service life prediction modeling software and predicted to last only 15.2 years before the first repair would be needed (based on mix components and the marine environment). Adding MCI®-2005 to the mix design tripled the service life prediction to a very positive 46.9 years before the first repair. However, the visionary expectations of the property owner drove the search to select a high-density concrete mix previously used with the Florida DOT. A reduced water/cement ratio and addition of pozzolans brought the service life prediction up to more than 100 years. Including MCI®-2005, the LIFE-365 model prediction increased to more than 150 years, exceeding the owner's original expectations.



In addition to extending service life, MCI®-2005 has the advantages of being a USDA Certified Biobased Product (contains 67% USDA certified biobased content) and being UL certified to meet ANSI/NSF Standard 61 for use in potable water structures. The admixture was manufactured locally at Cortec® Biotechnology Campus in Sarasota, Florida. Use of the material will help the project earn credits toward LEED certification if desired. The seawall was completed in late 2017 and according to predictions should not require normal concrete repairs until well beyond the year 2167, allowing the property owner's family to enjoy the protection of a sustainable seawall for many generations.

## New Equipment Expands Cortec® VpCI® Paper Perf Capabilities to 50 Inches

New perforator equipment at Cortec® Coated Products (CCP) in Eau Claire, Wisconsin, allows customers to order VpCI® paper on rolls perforated into sheets of any length (18 inches [0.46 m]) minimum) and up to 50 inches (1.27 m) wide. This offers users the convenience of tearing large format sheets off as needed for wrapping or interleaving large metal parts for corrosion protection during shipping or storage. The new equipment also runs faster and features a state-of-the-art safety system.

## EcoCortec® Announces Partnership in European BIOCOMPACT Project

In January, Cortec® announced the partnership of EcoCortec® d.o.o. in the €1.95 million European BIOCOMPACT project. The project aims to prevent the hazardous environmental impact of conventional plastic materials discarded in the environment and promote sustainability and innovation in packaging technologies.

EcoCortec® is one of 10 international project partners and will be involved in developing the audit tool and business support service concerning tool testing, feedback on usefulness, and quality of tools. EcoCortec® will also participate in pilot actions, case study prep support, and conferences.

EcoCortec® has been promoting environmentally sustainable packaging solutions for over a decade from its base in Croatia. VpCI® film, which is produced at the plant, has already had a large impact on making corrosion protection more environmentally friendly by reducing the need for traditional hazardous and cumbersome rust preventatives.

## IN THE PRESS

### Clean Room Article Features VpCI® ESD Paper for Electronics

Cortec's EcoSonic® ESD Paper was featured in a special "How It Works: Protecting Sensitive Electronics from Corrosion and Static Electricity" article for *Controlled Environments*. The article first introduces the problem of static electricity and corrosion, which can damage sensitive electronics in the production stage. It goes on to explain how EcoSonic® ESD Paper can be used to protect against static and corrosion and increase production efficiency. It also provides physical protection against puncture and pinching. The paper can be used to line work trays and interleave components. If desired, the paper can also be laid on a workbench to make a temporary ESD-safe workspace. The ESD coating on EcoSonic® ESD Paper is derived from soybean oil and shows better performance on the static half-life test than papers with conventional anti-stat coatings. Read the full article here: <https://www.cemag.us/article/2017/11/how-it-works-protecting-sensitive-electronics-corrosion-and-static-electricity>

### USDA Certified Biobased Content of EcoClean® Biodegradable Scale and Rust Remover Featured in Materials Performance

In its October 2017 edition, *Materials Performance (MP)*, the monthly publication of NACE International, highlighted the certification of EcoClean® Biodegradable Scale and Rust Remover as a USDA Certified Biobased Product. The biodegradable scale remover contains 100% USDA certified biobased content and qualifies for federal purchasing under the USDA's BioPreferred® program. This fast-acting product dissolves heavy scale, corrosion, and naturally occurring oxides off metals and is safe to use with iron, carbon steel, stainless steel, copper, aluminum, magnesium, and various alloys. Read more: [https://www.cortecvci.com/whats\\_new/announcements/Mat.Perf.Oct.pdf](https://www.cortecvci.com/whats_new/announcements/Mat.Perf.Oct.pdf)

### Cortec's Participation in USDA BioPreferred® Program Highlighted by Agri-Pulse

In a January 2018 article by Agri-Pulse (a comprehensive weekly news source for the agriculture industry) Cortec® Corporation was one of a handful of companies interviewed due to their participation in the USDA BioPreferred® Program. Agri-Pulse wanted to investigate the success of this program, which was launched to encourage the development and use of products made from renewable resources.

Cortec® Product Development Manager, Ming Shen, who plays a major role in launching new Cortec® USDA Certified Biobased Products, shared with Agri-Pulse that Cortec® has more than 30 products listed with the BioPreferred® Program. "It shows our commitment to a sustainable environment," she commented.

Cortec® R&D is busy developing more sustainable products to register with the BioPreferred® program in the near future. Stay tuned for additional information on upcoming USDA Certified Biobased Product releases from Cortec®! Read more: [https://www.cortecvci.com/whats\\_new/announcements/Agri-Pulse-Article.pdf](https://www.cortecvci.com/whats_new/announcements/Agri-Pulse-Article.pdf)

### White Paper Discusses Cortec's Role in the Renewable Energy Market

Renewable energy is a growing trend around the globe. With this in mind, Cortec® recently published a white paper that surveys the growth of wind energy and solar power. The paper goes on to detail how Cortec® VpCI® coatings, rust removers, emitters, film, and MCI® products can be used to protect specific components of windmills and solar panels. To read the informative white paper, please visit: [https://www.cortecvci.com/whats\\_new/announcements/Renewable-Energy.pdf](https://www.cortecvci.com/whats_new/announcements/Renewable-Energy.pdf)

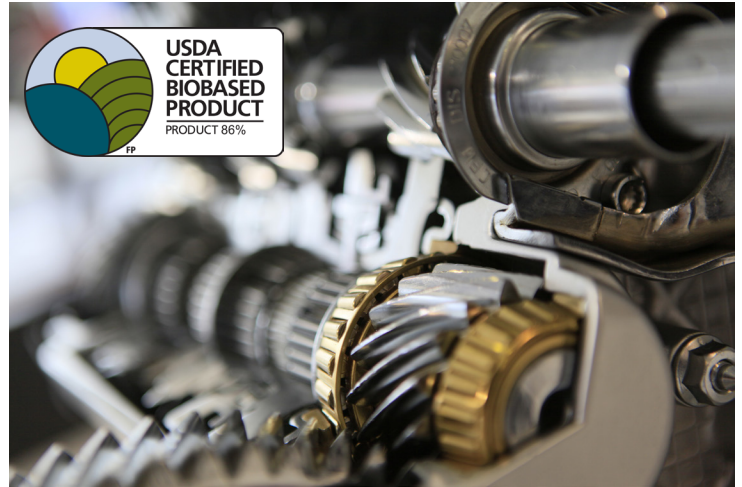


## PRODUCT RELEASES

### EcoLine® Biobased Grease

In many sectors such as the oil and gas, transportation, and marine industries, machinery and bearings are exposed to extremely corrosive environments where moisture, salt spray, high humidity, fluctuating temperatures, and other corrosive conditions are common. These environments make the use of a corrosion inhibitor wise if not imperative. To meet the double need of lubrication and corrosion protection in harsh environments while remaining environmentally conscious, Cortec® Corporation has developed EcoLine® Biobased Grease powered by Nano VpCI®. This multipurpose biobased grease shows effective wear prevention properties and offers superior corrosion protection. It contains 86% USDA certified biobased content and qualifies for federal purchasing under the USDA BioPreferred® Program.

Learn more: [https://www.cortecvci.com/whats\\_new/announcements/EcoLine-Biobased-Grease-PR.pdf](https://www.cortecvci.com/whats_new/announcements/EcoLine-Biobased-Grease-PR.pdf)



### EcoLine® VpCI®-642

Cortec® has developed EcoLine® VpCI®-642 to avoid corrosion during hydrostatic testing while allowing users to take advantage of the abundant supply of seawater in offshore environments. The addition of EcoLine® VpCI®-642 allows seawater to be safely utilized for hydrostatic testing without the danger of premature corrosive equipment failure. EcoLine® VpCI®-642 effectively protects ferrous metals in contact with the corrosive, high-chloride fluid by forming a protective layer on metal surfaces and inhibiting cathodic corrosion reactions. Its low dosage of 0.3-0.75% by volume makes it economical and cost-competitive. Chiefly derived from renewable resources, EcoLine® VpCI®-642 contains 93% USDA certified biobased content.

Learn more: [https://www.cortecvci.com/whats\\_new/announcements/EcoLine-VpCI-642-PR.pdf](https://www.cortecvci.com/whats_new/announcements/EcoLine-VpCI-642-PR.pdf)



### EcoAir® BioClean Spray

Cortec's EcoAir® BioClean Spray is a gentle but effective cleaner for removing soil and stains from hard surfaces. It is predominantly derived from coco oil and corn syrup—renewable resources and natural components that are non-toxic, non-hazardous, and biodegradable. EcoAir® BioClean Spray can be easily sprayed onto soiled surfaces to gently clean dirt, soil, dust, debris, and mold/mildew stains from wood, metal, plastics, and other hard surfaces. After being left to dry for 30 seconds to 20 minutes (depending on level of contamination), the surface treated with EcoAir® BioClean Spray can be wiped with a clean, damp cloth to remove the debris or stains. No rinsing is required unless desired. EcoAir® BioClean Spray is packaged in recyclable\*, convenient-to-use EcoAir® spray cans powered by compressed air. Learn more: [https://www.cortecvci.com/whats\\_new/announcements/EcoAir-BioClean-Spray-PR.pdf](https://www.cortecvci.com/whats_new/announcements/EcoAir-BioClean-Spray-PR.pdf)



*\*Please verify local regulations before disposing.*



### CorrProTec™ 372 powered by Nano VpCI®

Cortec's CorrProTec™ is an exciting extra thick version of a water-based acrylic peelable coating that provides protection in harsh, outdoor, unsheltered applications. The high-build/high-viscosity product is specially designed to protect metal surfaces such as splines, threads, or machined areas that have dynamic profiles. Once applied, it hardens into a thick covering that protects multi-metals from corrosion and also offers excellent UV resistance. The coating also protects freshly machined surfaces against physical abrasion such as nicks or dents. When the coated metal part reaches its destination or is needed for use, the coating can simply be peeled off and discarded as solid waste, leaving behind a clean and corrosion free surface.

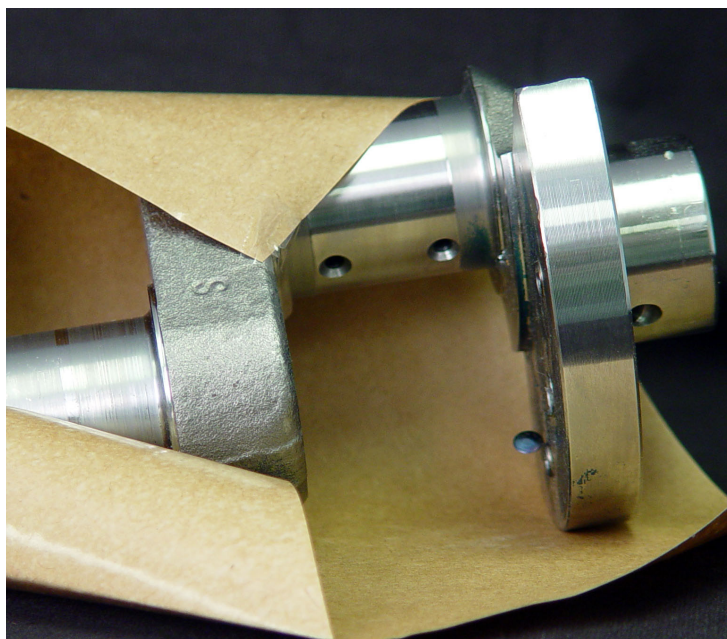
Learn more: <https://www.cortecvci.com/Publications/PDS/CorrProTec-372-powered-by-Nano-VpCI.pdf>



### EcoShield® Super Barrier Paper

Cortec's introduction of a fully recyclable moisture barrier paper offers a competitive replacement to traditional waxed or polycoated papers that cannot be recycled directly into the pulp and paper stream. The new high gloss EcoShield® Super Barrier Paper and Linerboard relies on a water-based moisture barrier coating. The paper demonstrates a water vapor transfer rate that is competitive with polycoated paper and has excellent oil and grease resistance.

Learn more: [https://www.cortecvci.com/whats\\_new/announcements/EcoShieldSuperBarrierPaperPR.pdf](https://www.cortecvci.com/whats_new/announcements/EcoShieldSuperBarrierPaperPR.pdf)



### EcoShield® Barrier Coating

Cortec's waterborne moisture barrier coating also gives paper manufacturers the ability to create non-toxic, effective, environmentally friendly paper and corrugated-board alternatives to wax and polyethylene papers. By applying EcoShield® Barrier Coating onto their Kraft paper, recycled paper, and linerboard, manufacturers can produce fully recyclable and repulpable paper and boxes that resist moisture, oil, and grease.

Learn more: [https://www.cortecvci.com/whats\\_new/announcements/EcoShield-Coating-PR.pdf](https://www.cortecvci.com/whats_new/announcements/EcoShield-Coating-PR.pdf)

## UPCOMING EVENTS

International Conference on Bio-based Materials  
May 15<sup>th</sup>-16<sup>th</sup>, 2018  
Maternushaus, Cologne  
Germany  
Booth No. 18  
[www.bio-based-conference.com](http://www.bio-based-conference.com)



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