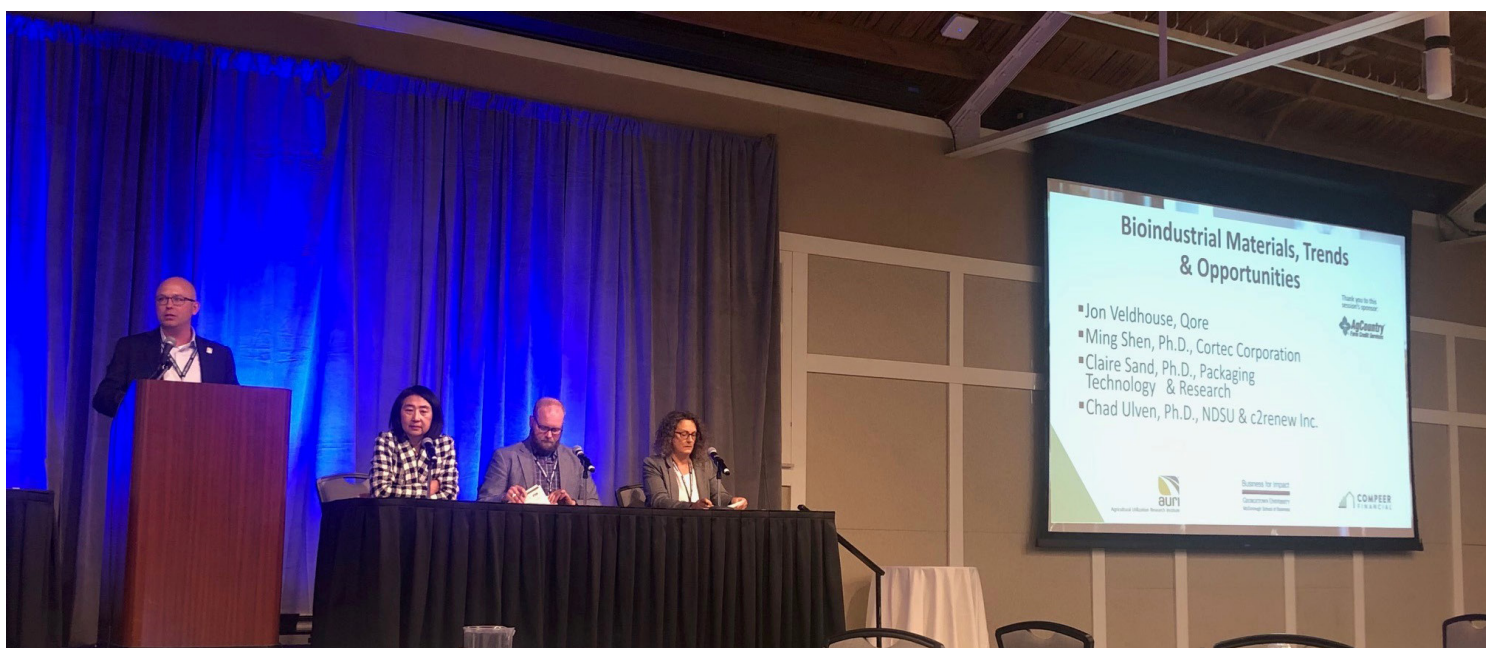


BioCORTEC® NEWSLETTER

May 2022

Cortec® Participates in AURI Renewable Materials Panel



Cortec® was honored to be represented at the fourth annual “New Uses Forum 2022” hosted by AURI (Agricultural Utilization Research Institute) in partnership with Compeer Financial and Georgetown University’s Rural Opportunity Initiative, March 23rd-24th in Brooklyn Center, MN. The event is sponsored by the MN Department of Agriculture and Minnesota Soybean Research & Promotion Council, among others, and seeks to explore how sustainability, innovation, and agriculture investment fit together.

Ming Shen, Ph.D., Cortec’s Sr. Scientist and Manager of Green Chemistry Initiatives, was invited to join a panel of experts on the topic of “Bioindustrial Materials, Trends & Opportunities.” Ming and others on the panel represented different aspects of the biobased/renewables value chain and each shared a five-minute presentation followed by an engaging Q&A discussion on the sourcing of renewable products.

In addition to presenting Cortec’s extensive work on developing a wide range of USDA Certified Biobased Products, Ming had the pleasure of networking with some important contacts in the field of renewables. Potential opportunities that arose from these encounters include

- The possibility of conducting a field trial on one of our newer biobased products
- The chance to consult a soybean industry expert for biobased product distribution advice

Cortec® looks forward to seeing how these developments unfold as we continue to be a leader in the use of renewable raw materials for industrial goods!

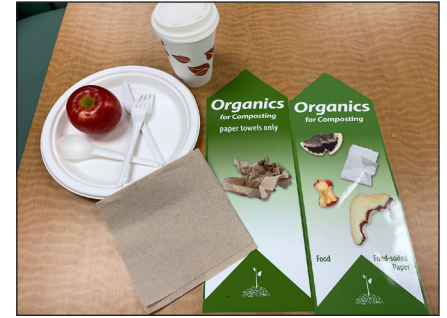
Organics Recycling Program Update: Estimated Three Tons of Organics Waste Diverted

It has been more than a year since Cortec® launched its organics recycling program, which is still going strong. Here's how much organic waste we estimate having diverted to the industrial compost site since January 2021!

Estimated weekly average pickup: 100 lbs (45 kg)

Length of program: 15 months

Total estimated organics disposal: 6,000 lbs (2,722 kg) = 3 tons (2.7 MT) of biodegradable content



Derek Jensen, who now oversees the program as our new Environmental Specialist (see below), said, "The reason that we have been able to collect so much is [that] our daily one time use products, are all biodegradable[. m]eaning that . . . our plates, utensils, coffee cups, napkins, and paper towels along with food scraps are being diverted away from landfills and turned into usable soil for our community."

One of the exciting parts of our program is that we have been able to put our own BPI certified compostable Eco Film® Bags (BPI #890974)* to use collecting the waste around the plant. These commercially compostable bin liners are manufactured at Cortec's Advanced Films Division in Cambridge, Minnesota, and are a great way to launch your own organics recycling program! Learn more about our organics recycling journey here: <https://www.cortecvci.com/press-release-cortec-organics-recycling-on-target-to-divert-5000-pounds-of-trash-to-compost-heap-by-years-end/>

Meet Our New Environmental Specialist!



Environmental responsibility is an important part of our BioCortec® focus and a key reason we have an Environmental Specialist on-staff. Derek Jensen is our newest employee to fill this position and joined our team December 6th.

Derek has a B.S. degree in Environmental Science with an emphasis on ecosystems. He also has several years of experience as an environmental coordinator working with erosion control and permit compliance in the construction industry.

Derek shared the following vision for his new role: ". . . I want to continue the phenomenal reputation that Cortec® has earned as an [e]nvironmentally friendly company by finding more efficient energy resources, minimiz[ing] waste, and focus[ing] on sustainable practices. . . . My hope is that companies like Cortec® will be able to influence our customers to think about reducing harmful impacts on the Planet without having to sacrifice the quality of their work."

Join us in welcoming Derek to the team!

Cortec® Ventures into Backyard Compostable Film Development

What if consumers could just throw a plastic bag onto their backyard compost heap when they were done using it? Cortec® is offering a new film formulation that can allow plastic bag users to do so.

Eco Film® II Backyard Compostable is the second generation of Eco Film®, a very early development in the quest for "green" packaging. While Eco Film® is compostable in a commercial composting environment, Eco Film® II Backyard Compostable takes environmental responsibility to the next level.

Formulated from TÜV Austria certified 'OK Compost Home' resin, Eco Film® II Backyard Compostable is designed to compost in less than one year at ambient temperatures in a backyard composting environment. Learn more: <https://www.cortecpackaging.com/cortec-corporation-unveils-the-second-generation-of-eco-film-for-backyard-composting/>



Demo Videos Show 'Greener' Products in Action

We are pleased to offer two demo videos that show two very different "sustainable" products in action! These videos are great tools to share quickly and easily with your clients to help them envision how "greener" versions of common industrial products could be used.

The video at right was filmed at a company trying Eco Wrap® on its pallet-wrapping equipment. The customer ended up loving the stretch wrap for palletizing bags of coffee and later placed an order for it.

An exciting development since then is that Cortec® received the 'OK compost INDUSTRIAL' certificate for Eco Wrap® from TÜV Austria on November 24th. This certifies that Eco Wrap® conforms to the criteria for industrial compostability under EN 13432 (European equivalent of ASTM D6400).*



In a different vein, the video excerpts at right and below show how our soy-based all-purpose lubricant, EcoLine® ELP, can be used for everyday maintenance around the shop or plant. Watch the video to see EcoLine® ELP applied in four different situations to

- Lubricate wheel bushings
- Lubricate garage door joints
- Quiet squeaky door hinges
- Loosen tight bolts

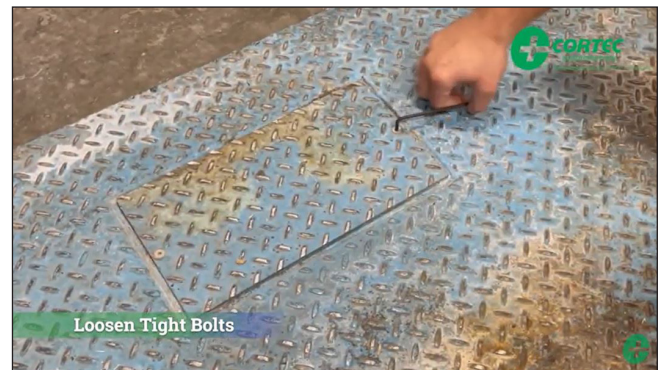
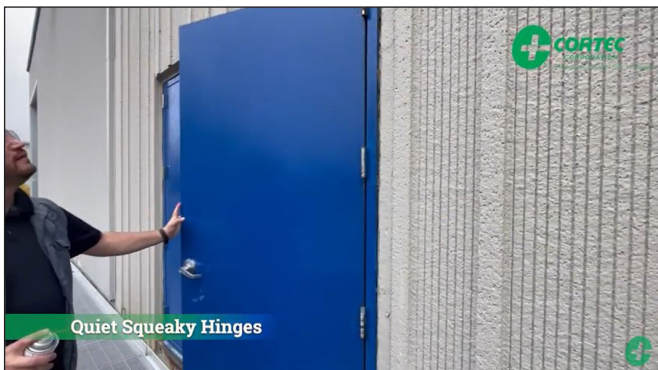
Be sure to share this video with any maintenance colleagues you know who are looking for more sustainable MRO products!



Eco Wrap® Palletizing of Coffee Bags
Watch here: <https://youtu.be/OEIJor64gi8?t=1>

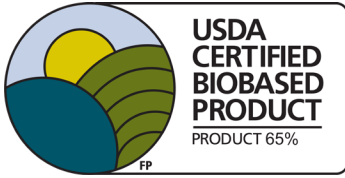


EcoLine® ELP Demo
Watch here: https://youtu.be/JVTzfg_3TM?t=1



* This product is intended to be composted in a commercial composting facility operated in accordance with best management practices. Check locally to see if such a facility exists in your community and if they will accept this product. Not suitable for backyard composting.

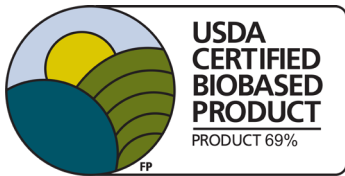
Introducing EcoAir® Biobased Outdoor Coating powered by Nano VpCI®



EcoAir® Biobased Outdoor Coating powered by Nano VpCI® is a ready-to-use temporary coating designed for severe marine and high humidity conditions. It comes in a convenient air-powered EcoAir® spray can, and is classified as non-flammable. It leaves behind an oily protective film that does not dry and offers outstanding rust prevention in outdoor applications.** EcoAir® Biobased Outdoor Coating powered by Nano VpCI® is a USDA Certified Biobased Product that contains 65% USDA biobased content. Learn more: <https://www.cortecvci.com/press-release-ecoair-biobased-outdoor-coating-new-addition-to-cortec-sustainable-corrosion-solutions/>



VpCI®-641 Awarded USDA Certified Biobased Content Label

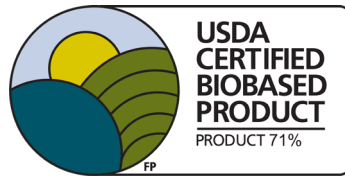


VpCI®-641 and VpCI®-641 PTSA corrosion inhibitors for hydrotesting and freshwater cooling systems have earned the USDA Certified Biobased Product label! They contain 69% USDA certified biobased content and can be used for corrosion protection during hydrostatic testing and in some cases in closed loop cooling systems filled with fresh water. VpCI®-641 PTSA includes a PTSA

tracer option that makes it easier to monitor proper concentration for ongoing effectiveness in closed loops and reused hydrotest water. Learn more: <https://www.cortecvci.com/press-release-vpci-641-hydrotest-corrosion-inhibitor-earns-usda-certified-biobased-product-label/>



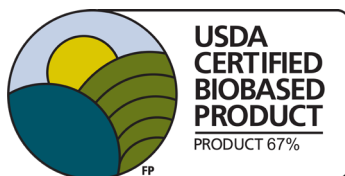
S-8 Awarded USDA Certified Biobased Content Label



S-8 corrosion inhibitor additive for food-can processing has also been awarded the USDA Certified Biobased Product label! S-8 contains 71% USDA certified biobased content and is designed for corrosion protection of sealed food cans during washing and sterilization. Learn more: <https://www.cortecvci.com/press-release-s-8-food-can-corrosion-inhibitor-awarded-usda-certified-biobased-product-label/>



MCI®-2005 Receives CE Certificate



MCI®-2005 is the first biobased corrosion inhibiting concrete admixture to receive the CE Certificate. This certificate was issued by IGH Institute, a Croatian company active in civil engineering professional services and scientific research. MCI®-2005 is available in Europe through Cortec's manufacturing facility in Split, Croatia. Learn more: https://www.cortecvci.com/whats_new/announcements/Declaration-of-performance-mci_2005.pdf#new_tab



****Users should take care not to expose the coated materials to environments where the coating could be washed off by rain or similar elements.**

How to Choose the Right Bionetix® Rx for Your Needs

Our Canadian subsidiary Bionetix® International adds an interesting and exciting dimension to our BioCortec® concept by focusing on biotechnologies that harness the power of nature. However, Bionetix® stands out by taking a tailored approach instead of giving a one-size-fits-all solution. These four questions can help you choose the right prescription for your application.

Question 1: What Industry Do You Work In?

Bionetix® offers specialized products for wastewater, cleaning, agriculture, livestock, and more!

Question 2: What Is the Main Problem?

Odors? Clogged drains? Overloaded grease trap? Wastewater imbalance?

Question 3: What Kind of Contaminants Are You Dealing With?

Bionetix® matches the optimal combination of good “bacteria” with the type of contaminants they degrade.

Question 4: Do You Want a Ready-to-Use (RTU) Product or a Concentrate?

Concentrates often work well for formulators or shipping limitations. RTUs are easier for end users.



Contact us here for additional help! <https://www.bionetix-international.com/contact-us/>

Biotechnology Solutions for Landscaping, Farming, Wastewater Treatment, and Cleaning

What if you could have cleaner ponds, healthier grass, and better fruit and vegetable yields using the mechanisms of nature? Bionetix® biologicals for landscaping, farming, wastewater treatment, and cleaning open up an exciting new world of possibilities.



less reason to grow. They also consume organic wastes and excess nutrients, speeding up the decomposition of unwanted materials to promote a cleaner, clearer, healthier pond environment.



to the soil and contain natural surfactants that improve water uptake to reduce stress in drought. ECO-TURF™

Ponds: BCP54™ helps clean up fishponds and ornamental ponds via bioaugmentation. Microorganisms in BCP54™ consume nitrogen and phosphorus, reducing nutrient pollution and giving algae

Grass: ECO-TURF™ and ORGANIC PLUS™ make a great lawncare team. Both contain humic and fulvic acids, which promote a healthy growing environment and good nutrient absorption. They also add nutrients

adds 75 million CFU/g of beneficial bacteria to the soil to make it richer through better debris decomposition. ORGANIC PLUS™ stimulates the process.



organisms and nutrients directly to the soil. It can help with nitrogen fixation and phosphorus solubilization. One farmer who used these two products in a soybean trial in Japan found a significant improvement on plants within the test zone compared to those outside.



SWINE-FEED™, and DAIRY-FEED™ can also be added directly to livestock bedding to reduce odor and bedding maintenance costs by improving waste digestion there.

Fruits + Vegetables:

ORGANIC PLUS™ can also be used as a biostimulant at fruit and vegetable farms. SOIL-BAC™ takes a more proactive approach to agriculture health by adding both beneficial micro-

organisms and nutrients directly to the soil. It can help with nitrogen fixation and phosphorus solubilization. One farmer who used these two products in a soybean trial in Japan found a significant improvement on plants within the test zone compared to those outside.

Animal Bedding:

Bionetix® animal feeds serve as “probiotics” for livestock to support better digestion and promote a healthy immune system. Of further interest is the fact that POULTRY-FEED™,

SWINE-FEED™, and DAIRY-FEED™ can also be added directly to livestock bedding to reduce odor and bedding maintenance costs by improving waste digestion there.



Manure and Compost: STIMULUS™ is a natural biostimulant, surfactant, and odor control product derived from natural plant extract. STIMULUS™ inhibits the formation

of odors while encouraging the composting process by supplying a rich bacterial food source of macro- and micro-elements. STIMULUS™ can also bind ammonia and inhibit urease activity. It helps control odors resulting from manure decomposition and is great for neutralizing musty odors from yeast and molds that form in leaf piles over the winter for composting.



Wastewater: Bionetix® has a wide range of bioaugmentation products that are tailored to contaminants in different types of industrial and municipal wastewater. Products

such as BCP11™ are suited to degrade chemical waste, while BCP35M™ is used to treat wastewater with petro-

leum hydrocarbons. BCP25™ is used in dairy industries. BCP655™ is a bioconverter that can reduce ammonia levels and remove organic nitrogen. STIMULUS™ may also be added to help boost the decomposition process, keep ammonia levels in check, and reduce odors in lagoons and clarifiers.



Cleaning: Bio-enzyme cleaners use the synergistic power of microorganisms, bio-enzymes, and biodegradable surfactants to clean away waste materials, stains, and odors. By incorporating non-pathogenic bacteria and free enzymes into cleaning products,

formulators can direct a natural digestive power against wastes and stains. This action helps with odor control by removing the odor source. Furthermore, residual microorganisms left on the surfaces continue to penetrate and digest contaminants even after the initial cleaning.

Learn more about this exciting variety of biological products and their uses here: <https://www.bionetix-international.com/>

UPCOMING EVENTS

ISSA INTERCLEAN 2022

(Bionetix® exhibiting)
May 10th – 13th, 2022
RAI Amsterdam
Europaplein
1078 GZ Amsterdam
The Netherlands
Booth # 02.405

<https://www.intercleanshow.com/amsterdam/>



Cortec® World Sales Meeting

June 15th-17th, 2022
Saint Paul Hotel
Saint Paul, MN
<https://info.cortecvci.com/l/562712/2022-04-28/lj7rrh>



ISSA North American Show 2022

(Bionetix® exhibiting)
October 11th-13th, 2022
McCormick Place
Convention Center
Chicago, IL
Booth #4732

<https://www.issashow.com/>



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