

BioCORTEC®

NEWSLETTER

November 2020



Celebrating Our Golden Anniversary of Biotechnology Solutions!

November 2020 is of special note for our BioCortec® brand because it marks the 10th anniversary of our biotechnology acquisition: Bionetix® International. The entry of Bionetix® into the Cortec® family on November 10th, 2010, allowed us to reach our third technological platform of specialty biologicals that harness natural mechanisms for environmental cleanup.

We are now able to make successful biological treatments a reality by using Bionetix® technology to improve the efficiency of wastewater treatment, enhance the power of cleaning formulations in place of harsh chemicals, and provide better options for oil and gas spill cleanup.

A look at the last ten years reveals several exciting areas of growth for Bionetix®!

- Our reach has expanded in the U.S., Latin America, Asia, and Europe
- Our new products have grown the Bionetix® lineup by 20%
- Our Quality Management System has upgraded from ISO 9001:2000 to the latest ISO 9001:2015
- Our website has been freshly redesigned and is more user-friendly
- Our product data sheets are now available in more languages

On behalf of Bionetix® International, Office Manager Monica Yang offers hearty thanks to all of Bionetix's customers: "Thank you for supporting and inspiring us in all these years. Your satisfaction is what motivate[s] us to continue."

Learn more about the possibilities of biotechnology on our Bionetix® website: <http://www.bionetix-international.com/>

A Decade in the Wisconsin Green Tier!

This June was the 10-year anniversary of participation in the Wisconsin Green Tier Program for our two plants in Wisconsin: Cortec® Coated Products in Eau Claire, and Cortec® Spray Technologies in Spooner. Both of these plants have implemented environmental management systems that allow them to demonstrate environmental performance above and beyond state regulatory requirements. Learn more about what our two Green Tier participants have accomplished in the recent past here: <https://www.cortecvci.com/celebrating-10-years-as-a-tier-1-wisconsin-green-tier-participant/>

PRODUCT NEWS & IDEAS

A Biobased Alternative to WD-40®?

Most, if not all, of your customers have probably heard of WD-40® and have probably used it, too. But have they ever considered trying a biobased alternative? For that matter, did you think this was even possible? The good news is that yes, you really can offer a practical biobased alternative in the form of EcoLine® ELP—and encourage it, too, thanks to comparison data released just a couple of months ago.

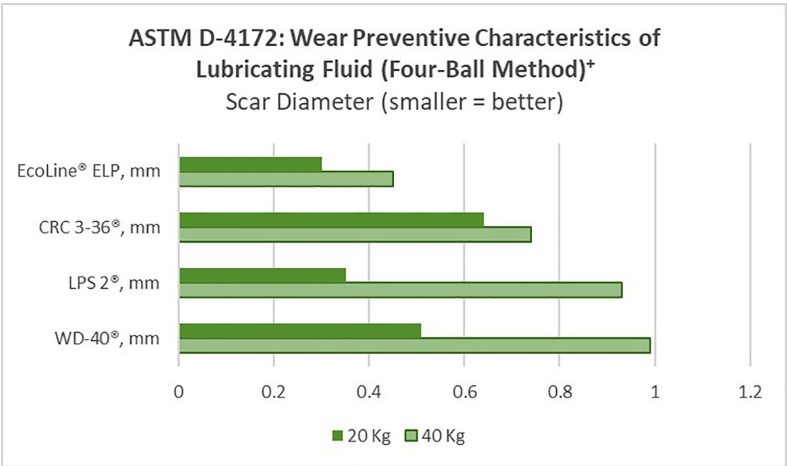
The comparison data come from testing EcoLine® ELP for key characteristics against brand name all-purpose lubricants/penetrants WD-40®, CRC 3-36®, and LPS 2®.* These data are great for helping customers weigh the benefits of well-known traditional petroleum-based products against something new and biobased. If your customers have that nagging question of whether a biobased product will perform well enough to be worth going out of one's way to purchase, here is what you can tell them about EcoLine® ELP:

- EcoLine® ELP was able to hold up under a much heavier load than the other lubricants, while avoiding scarring, when tested according to the ASTM D-3233 Falex Pin and Vee Block Test, which demonstrates extreme pressure properties.

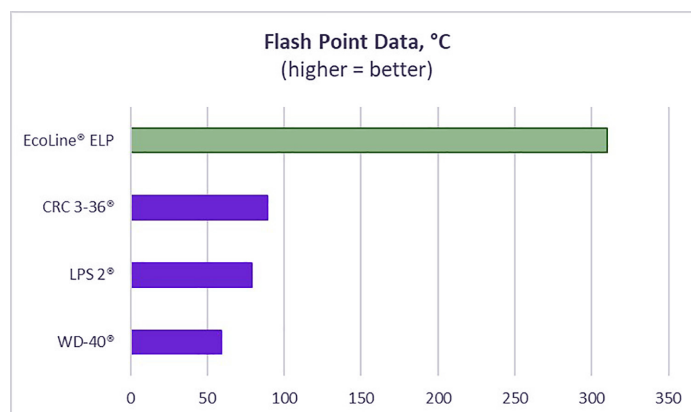
ASTM D-3233: Measurement of Extreme Pressure Properties of Fluid Lubricants (Falex Pin and Vee Block Methods)*				
Parameter	EcoLine® ELP	WD-40®	CRC 3-36®	LPS 2® ^a
Final Load, lb	4500	1004	1190	498
Steel Pin	Fairly Smooth	Scarred	Scarred	Scarred
V Block	Smooth	Scarred	Fairly Scarred	Scarred
Coefficient of Friction	0.04	0.24	0.17	0.32
Tooth Count	1405	398	481	211

^a Test failed. Unable to maintain load.

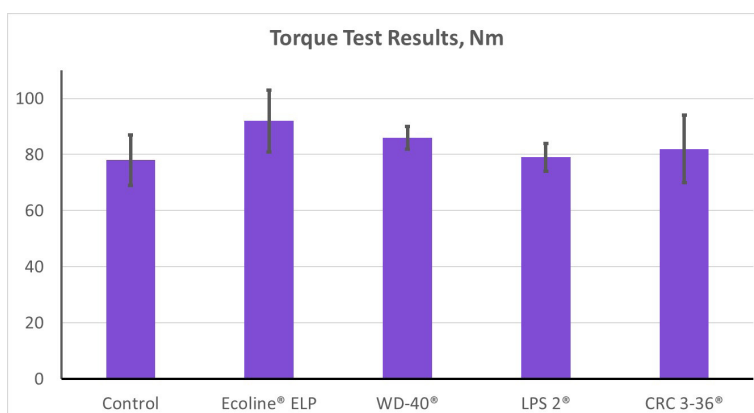
- EcoLine® ELP showed a much smaller scar diameter than the three other products, when tested according to ASTM D-4172 Wear Preventive Characteristics of Lubricating Fluid (Four-Ball Method).



- EcoLine® ELP was in close range with the competition for torque testing (bolt loosening effect).



- Parts treated with EcoLine® ELP passed more than 3000 hours corrosion-free in 100% humidity at 50 °C (122 °F) (ASTM D-1748), comparable to the competition.
- EcoLine® ELP contains 95% USDA certified biobased content.
- EcoLine® ELP is non-flammable and is not classified as a GHS hazard.



If you want to learn more about the benefits of EcoLine® ELP and how to communicate this to potential end users, be sure to read about it in our September press release: https://www.cortecvci.com/whats_new/announcements/EcoLine-ELP-and-the-Competition-PR.pdf

Another Cortec® Product Earns the USDA Certified Biobased Product Label

As you may have noticed, our portfolio of USDA Certified Biobased Products is growing. Just this summer, we added EcoShield® Barrier Paper to the list! EcoShield® Barrier Paper is exciting because it offers a repulpable alternative to polycoated paper, which has traditionally been difficult to recycle through normal routes. It contains 65% USDA certified biobased content and also passes TAPPI T 240 om-12 Repulpability Testing. Of further note is that it is made from components formulated in compliance with FDA Code of Federal Regulations Title 21:

- §176.170-Components of paper and paperboard in contact with aqueous and fatty foods
- §176.180-Components of paper and paperboard in contact with dry food

EcoShield® Barrier Paper displays a Water Vapor Transmission Rate (WVTR) comparable to polycoated paper and much superior to waxed paper.

Water Vapor Transmission Rate			
	EcoShield® Paper	Polycoated Paper	Waxed Paper
WVTR† (g/hour•m²)	0.61-0.69	0.47-0.71	6.5-6.9

†Tested according to ASTM E-96, 73 °F (23 °C), 50% RH

*LPS 2® is a registered trademark of Illinois Tool Works. WD-40® is a registered trademark of WD-40 Company. CRC® and 3-36® are registered trademarks of CRC Industries, Inc.

BPI Recertification of Two Compostable Films

We are pleased to announce the recent recertification of two of our compostable films by BPI, the Biodegradable Products Institute! In order to maintain BPI certification, compostable plastics must be periodically recertified to confirm they meet the specifications of ASTM D6400 for compostability in a municipal or industrial composting facility.** Our Eco Film® and Eco Works® Film have recently achieved recertification under BPI certificate #890974! Eco Film® is a basic compostable film, while Eco Works® goes one step up in sustainability as a compostable film available with 10% or 30% biopolymer sourced from annually renewable feedstocks. Contact us for details: <https://www.cortec-packaging.com/contact-us/>



**COMMERCIALY
COMPOSTABLE ONLY.
FACILITIES MAY NOT
EXIST IN YOUR AREA.**
CERT #890974

Versatile and Effective: Ideas on Where to Use Cortec® Biobased Products

A look at our news releases for the last six months shows how diverse our selection of biobased products and their applications can be. Here's a brief overview of how some of those biobased and biological products can be put to use to help a variety of different industries!

Rust Removal and Prevention

Winter Transportation	Bearings Manufacturers	Gun Manufacturers
<ul style="list-style-type: none">Mix FlashCorr® VpCI® with wash water to prevent flash rust and neutralize harsh salt buildup on vehicles.Add M-605 PS to CaCl₂ based deicer.	<ul style="list-style-type: none">Remove rust with VpCI®-422Replace traditional rust inhibitors with EcoLine® Cutting Fluid.Lubricate with EcoLine® biobased greases.Package bearings in CorShield® VpCI®-146 Paper or EcoShield® VpCI®-144 Paper.	<ul style="list-style-type: none">Package firearm components in CorShield® VpCI®-146 Paper or EcoShield® VpCI®-144 Paper.Insert a BioPad® for an extra strong dose of Vapor phase Corrosion Inhibitors.

Bionetix® Biotechnology

Oil Spill Cleanup	Aquaculture	Septic System Maintenance
<ul style="list-style-type: none">Allow "good bacteria" from BCL5000™ to digest hydrocarbon residue on drive-ways and warehouse floors.Keep SPILL KIT 35S™ on hand for emergency spills!	<ul style="list-style-type: none">As we head into Southern Hemisphere summer, use BCP655™ to get nitrogen and ammonia levels under control in ponds.Tackle nutrient pollution, odors, and sludge buildup with BCP54™.	<ul style="list-style-type: none">Apply ECO-SEPT™, FIZZY-TAB™, or BIO-BOOST Tablet 1T™ to your septic tank to reduce sludge and pumping frequency.

RESOURCE NEWS

A New Portal to BioCortec® Products!

This year, we were pleased to release our new, improved BioCortec® website! This website focuses on Cortec's line of corrosion and cleanup solutions geared toward sustainability and environmental responsibility. It mirrors our BioCortec® brochure, which was also updated this year. New to the website is a section on our Bionetix® products, a collection of biologicals and biostimulants that can be used in waste treatment, cleaning products, and oil and gas bioremediation. The website also includes an expanded portfolio of USDA Certified Biobased Products. Be sure to take a look at the fresh new website and browse our BioCortec® options for yourself! <https://www.biocortec.com/>

**Your Source for Sustainable,
Environmentally Friendly
Technologies for Corrosion and
Cleanup**

[OUR PRODUCTS](#) [LEARN MORE](#)

A longstanding commitment to environmental responsibility

Cortec® Corporation is committed to providing world class corrosion solutions for industries across the globe. As the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies, Cortec® seeks to deliver cost-effective, user-friendly integrated solutions for corrosion problems in the packaging, metalworking, construction, electronics, oil and gas, and many other industries.

**Not available in all areas.

New Case Histories on BioPad® and Eco-Corr Film®!

This year, we have published several exciting new case histories on biobased or compostable corrosion solutions in action! See a sample of those stories below.

BioPad® Protects Marine Engines Stored Outdoors

A manufacturer of huge engines for the maritime industry has been using VpCI® for corrosion protection over the last decade. The engines have to be stored outdoors near the sea for 12 months before export. They typically protect the equipment by coating the crankshafts with VpCI®-329 and wrapping engines inside VpCI®-126 HP UV FR Film along with VpCI®-130 Series Foam inserts and sometimes VpCI®-105 Emitters (for junction boxes). BRANORost VCI Chips were used to protect the insides of the engines, but in 2018, the customer decided to see if they could replace these with BioPad®. They did a six-month trial-run by hanging BioPad® in three engines stored outdoors. The test was successful, and the manufacturer placed an order for 7,000 sheets of BioPad® to protect 150 engines per year. Some of the advantages were that BioPad® has a lighter smell than the previous product and was a less expensive option that protected twice as much space per square meter (1.2 yd²). BioPad® is also a USDA Certified Biobased Product that contains renewable materials derived from corn-processing byproducts. Read the full case history here: https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch675.pdf



Major Automaker Trial of Eco-Corr Film®

Recently, a subsidiary of one of the world's three largest automakers was looking for a more environmentally responsible packaging option that could reduce their amount of conventional plastic packaging. They decided to test Eco-Corr Film® on engines going overseas from Europe to Pune, India. (Eco-Corr Film® is compliant to ASTM D6400 for commercial composting.) The engines arrived in India with no rust upon inspection. The Eco-Corr Film® was disposed with other biowaste into specially built compost bins at the Pune plant and had largely degraded after six months. The plan was to use the compost in the logistics park where visitors and employees have had the opportunity to plant trees to rejuvenate the area. The company started a one-year trial of Eco-Corr Film® in July 2020 to investigate use of Eco-Corr Film® on a large scale, with the possibility of cutting conventional plastic packaging in half for shipments to Pune (as much as 500 kg [1102 lbs] per month). Read the full case history here: https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch682.pdf



BioPad® for Export Shipping of High Voltage Interrupters

A customer in India had been facing rust problems and rejections on high voltage interrupters exported to other countries. They had been using yellow VCI bags and locally made VCI foam for protection, but this was not enough to meet their goal of zero rust. In late 2019 to early 2020, they cautiously evaluated the option of using VpCI®-126 Blue and BioPad® instead and ended up with satisfactory results in lab testing and three field trial shipments to China. They have since implemented the dry packaging solution at their own plant and have started having their vendors use it, too. Read the full case history here: https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch680.pdf





4119 White Bear Parkway, St. Paul, MN 55110 USA
Phone (651) 429-1100, Fax (651) 429-1122
Toll Free (800) 4-CORTEC, E-mail productinfo@cortecvci.com
Printed on recycled paper ♻️ 100% Post Consumer

