

NATIONAL BIOBASED PRODUCTS DAY:

LET THE CELEBRATION CONTINUE

We celebrated National Biobased Products Day on March 8th, but that doesn't mean our focus on sustainable corrosion control has to stop! In case you missed it, here are a few of the biobased questions we asked and answered:

Where Do Biobased Products Come From?

At Cortec[®], the goal of creating environmentally responsible corrosion control solutions has led our R&D team to find ways to substitute renewable raw materials for various petroleum-based ones. Some common resources are canola oil, trees (thanks to responsible forestry initiatives), corn, and soybeans. As Cortec[®] Sr. Scientist and Manager of Green Chemistry Initiatives, Ming Shen, noted, "We

innovate with sustainable, renewable resources that are readily available in the Midwest, where four of our plants are located. . . . These agricultural materials provide a variety of useful properties that we need at a reasonable price."

What Can You Do with Biobased Materials?

The possibilities of biobased products are endless! Cortec®, which represents just a sliver of total biobased product categories, nevertheless boasts a growing portfolio of more than 40 USDA Certified Biobased Products, including technologies for rust removal, cleaning, rust prevention, lubrication, construction, and paint removal. While biobased

sourcing does not automatically equal better products, some "green" technologies are inherently groundbreaking, biobased content aside. For example, BioCorr® is a dry film rust preventative with excellent advantages over traditional rust preventative oils and greases that foster a messy and hazardous work environment. In contrast,



the characteristics of BioCorr® contribute greatly to the cleanliness, safety, and efficiency of the work environment.

Why Choose Biobased?

Now it's your turn! At minimum, going biobased is an easy way to improve your corporate environmental image. Better still, finding a biobased product with intrinsic advantages will give you a winning combination environmentally and practically. The possibilities await.

Explore how going biobased could support your environmental and business initiatives.



AMPP is the big corrosion event of the season, bringing together thousands of corrosion engineers and other related experts and professionals to focus on metals protection for five days. This year, the big show took place at Music City Center in Nashville, Tennessee, and played the familiar song of greeting old friends, meeting new connections, and attending technical sessions. Two special highlights, however, related to the biobased side of Cortec®.

Ming Shen (Sr. Scientist & Manager, Green Chemistry Initiatives) presented a peer-reviewed paper (written in conjunction with Colin Gardner and Mike Gabor) on "Preventing Electrostatic Damage with Effective and Circular-Economy Friendly Protection." The presentation highlighted the need for ESD (electrostatic discharge) protection for electronics and how much of current packaging falls short of the circular economy (think pink

poly). She then presented the idea of using treated paper (made from renewable resources) to make envelopes with not only ESD protection but also VCI protection against corrosion. She finished by covering some of the tests performed on these characteristics and repulpability.

Back at the booth, Cliff Cracauer (EVP Sales & Marketing) fielded questions from *Inspenet*, a digital platform for the energy sector. Part of the three and a half minute interview focused on Cortec's mission to offer sustainable corrosion control options to industries around the world. He mentioned how Cortec® has been working with biobased alternatives to petroleum based carriers since the 1990s and pioneered compostable plastic with Vapor phase Corrosion Inhibitors.

Watch the whole interview for yourself at https://inspenet.com/en/video-tv/cortec-vapor-corrosion-inhibitors/!

A BIOBASED ANSWER TO FLASH RUST DURING MAINTENANCE

Has your maintenance job ever been interrupted by a layer of flash rust on the parts you are fixing? Next time that happens to you, don't panic. While you could grind or sandblast the surface to restore it to like-new condition, it may be easier to use Cortec's biobased rust removers to restore the surface back to rust-free condition. Here's what that might look like!

Step One: Remove Rust with Biobased Rust Removers

If the part can be dipped, fill a container with VpCI®-422 (diluted with water to the desired strength) and completely immerse the part in the solution (clean away any grease first if present prior to immersing). Periodically check the part every 20 minutes for up to 24 hours, scrubbing as needed to remove loosened rust. Use EcoClean® 423 Rust Remover on parts or surfaces, such as shafts or flanges, that cannot be immersed. Cover with plastic wrap as needed to keep the rust remover from drying out. Periodically check progress and use a scrub brush to remove loosened rust. Both VpCI®-422 and VpCI®-423 are USDA Certified Biobased Products for greater sustainability.

Step Two: Rinse with Water

When rust removal is satisfactory, rinse the corrosion and rust removal products with regular water to remove contamination.

Step Three: Neutralize and Prevent Flash Rust

After rinsing in regular water, clean the part with VpCl®-414, an alkaline cleaner that contains flash corrosion inhibitors to keep the surface from immediately re-rusting. This will give you a few days or a week to get the part installed without flash rust occurring on the clean surface.

Turn a Negative Surprise into a Positive Outcome

Rust surprises are never fun in the middle of maintenance, but they can be corrected and avoided the second time around with a simple rust removal and cleaning process like the one above.

<u>Contact Cortec® for additional ideas on rust removal and corrosion</u> prevention for both new and existing parts.









EcoAir® VpCI®-422 Rust Remover

WHAT'S NEW WITH **BIOLOGICALS?**

Over the last six months, our biotechnology subsidiary, Bionetix® International, has introduced two fascinating probiotic products: BIO-BOOM™ TAB and BIO-ECO-WASH™.

BIO-BOOM™ **TAB** is a tablet version of our portable toilet treatment technology for easy addition to the retention tank after each cleaning. BIO-BOOM™ TAB dissolves quickly (even in cold water) and mixes on its own for easy deodorization and ongoing maintenance. The main power behind BIO-BOOM™ TAB is its 25 billion beneficial microorganisms that digest organic waste and continue working in the retention tank long after application. BIO-BOOM™ TAB accomplishes effective treatment without the use of biocides or formaldehyde, making treatment better for users, sewage treatment plants, and the environment.



Learn more: www.cortecvci.com/product-release-giveyour-portable-toilet-a-probiotic-boost-with-bio-boom-nowin-easy-to-use-tablet-form



BIO-ECO-WASH™ is a low foaming cleaning concentrate for use in sensitive environments. It combines natural surfactants with probiotics for effective cleaning, degreasing, and surface prep in a variety of industrial and marine applications. With BIO-ECO-WASH™, industrial users can boost cleaning power while reducing their environmental impact. It is suitable for use in a variety of marine and transportation cleaning applications:

- Boat interiors and exteriors
- Buses, trucks, and cars
- Docks, pontoons, and other floating surfaces
- Mooring bollards

Learn more here: www.cortecvci.com/product-releasebionetix-launches-bio-eco-wash-probiotic-cleaner-forsensitive-environments



4119 White Bear Parkway, St. Paul, MN 55110 USA Phone (651) 429-1100 | Fax (651) 429-1122 | Toll-Free (800) 4-CORTEC STAY CONNECTED









