

The LEADING Edge



It's World Sales Meeting time again and we welcome you to Cortec® on September 22nd and 23rd. We are looking forward to seeing you in our laboratory, working together, exchanging ideas, learning from each other, and having some fun!

New Products

EcoOcean[™] and EcoWorks® AD bridge the environmental and performance gap that has existed for decades with other films. Cortec® is proud to announce the introduction of two new revolutionary BioPlastics to the BioCortec line of environmentally friendly products:

EcoOcean™

EcoOcean™ film and bags offer a unique combination of environmental and performance benefits previously unattainable by other plastics. It is the first plastic film to be marine and anaerobic biodegradable as well as commercial and low-temperature backyard compostable all without compromising on flexibility and strength. Ideally, it will be disposed of in commercial composting; however, plastics still end up in the waterways and the innate ability of EcoOcean™ to degrade in marine environments within months provides a solution to the ongoing problem of marine litter.



"EcoOcean™ will revolutionize the use of flexible packaging, especially in coastal areas of the world", Boris Miksic. EcoOcean™ has also been awarded USDA BioPreferred™ designation for Packaging Materials.

EcoWorks® AD

EcoWorks® AD was specifically designed for the anaerobic digestion and compostable films market. It is 100% compostable per ASTM D6400 and EN 13432 and anaerobically digestible per ASTM D5511 standard test methods. Anaerobic digestion is a series of processes in which microorganisms break down biodegradable material in the presence of oxygen, used for industrial or domestic purposes to manage waste and /or to release energy.

EcoWorks® AD has an advantage in nearly all intentional and unintentional disposal methods. In entombed landfills, the main benefit is the film's renewable content. In composting, it allows rapid aerobic biodegradation naturally and safely. In anaerobic digestion (AD) systems or methane producing landfills (WtE), EcoWorks® AD will rapidly break down in as little as fifteen days. In fact, the addition of this film to ADs has been found to increase the activity and rate of degradation within the system. It is heat, moisture, and chemical resistant making it an ideal film for organic waste diversion, community compost, and anaerobic digestion programs.

Can You Handle the Heat?

Cortec's best selling product just got better! Cortec's line of $VpCl^{\circ}-126$ film and bags has been expanded with the addition of the new $VpCl^{\circ}-126$ TRF formula. This product was specially designed for applications that require temperature resistance, above and beyond that afforded by $VpCl^{\circ}-126$. This new formulation provides the same level of corrosion protection properties you've come to expect from $VpCl^{\circ}-126$ but can withstand temperatures up to $\sim 165^{\circ}C$.

VpCI®-380, Railcar Coating – Next Generation

Cortec® introduces the next generation in railcar coatings, VpCl®-380. Due to the innovative design of complex, non toxic, organic corrosion inhibitors, VpCl®-380 can replace most primer / topcoat systems; at less than half the film thickness, with a one coat direct to metal (DTM) coating that out performs current, competitive products.

VpCI®-380 is designed to meet the demanding requirement of the rail car industry by offering a high performance, modified, water based acrylic. VpCI®-380 offers a non-flammable, environmentally friendly coating with fast drying capability and alkyd like gloss characteristics. It also exhibits excellent UV light and moisture resistance.

VpCI®-380 is designed to give a hard, yet flexible finish which resists chipping or cracking in prolonged exposure to sunlight, or extreme temperature changes. For the ultimate railcar coating VpCI®-380 can be used in conjunction with Cortec's VpCI®-395 primer. This combination will not only provide a showroom finish to a railcar, but it gives the added benefit of excellent chemical resistance.



S-14 Bio Powder

Cortec® is a significant player in the global economy and our overseas sales grow each day. Under such a situation the transportation cost of Cortec's goods should be considered as an important part of service. We are always trying to give our customers an option of using concentrates or ready-to-use products, depending on the application.

We recently recreated S -14 Bio Powder by adding improved solubility in water. This product prevents a wide variety of scales including Calcium, Magnesium and Barium based, and can be applied in cooling, mining, waste waters, oil recovery and many other applications. At the same time this product is biodegradable and in compliance with the strictest environmental regulations. The new edition of S-14 Bio Powder is more technological and easier to handle than the previously existing powder product. Now the customer has an option to use S-14 Bio powder or S-14 Bio liquid.



Anticorrosion Blocks for Water Treatment Application

Bionetix/Cortec® Laboratories have been working to formulate and manufacture a corrosion inhibiting block, extruded at Bionetix. The goal is to have a product- CorrBlock - which when immersed in the water of a cooling tower would slowly release corrosion inhibitor. By using such a product, the customer will no longer need expensive dosing equipment and labor for installing water treatment chemicals.

Cortec® laboratory is performing bench and pilot tests in a Cooling Tower with these blocks. During testing, suggestions for improvement are made providing customers with a product they will love. This block will provide efficient corrosion inhibition, give the advantage of low maintenance, and will not affect the functional characteristics of cooling towers. Check in for more information in October.

New Aplications

VpCI®-344 Replaces Vanishing Oil

VpCI®-344 is now being used as a replacement for vanishing oil in a wet tempering application. The product is metered onto the surface in order to provide some lubricity and corrosion protection during the process. To qualify the product, a customer did comparison testing with other products and found that VpCI[®]-344 performed favorably. They are using the product at a 5% concentration for carbon steel coils with very good success and without the environmental issues caused by using vanishing oil. The coils come out of the process relatively dry, and are then packaged for shipment to the customer or moved to another area for further conversion.

BioClean Spray

Do you need to clean and protect hard surfaces like wood, plastic, metal, and others from mold? BioClean Spray will help you eliminate existing contamination as well as provide prevention of future growth. BioClean Spray is non-toxic, biodegradable, and non-hazardous; and is manufactured from renewable resources. The same technology can be found in cosmetics and other personal care products such as hand cleaners, shampoos, and even baby wipes! This product is available in EcoAir® cans (pressurized by air), which unlike aerosols makes it non-hazardous for shipment and does not add any VOC to the product.

Cortec® Products **Certified for USDA BioPreferred[™] biobased labeling**

In January 2011, the U.S. Department of Agriculture (USDA) BioPreferredSM program launched a new labeling initiative to identify (commercial or industrial) biobased products or packaging, whose main ingredients are renewable plant, animal, marine, or forestry materials. This labeling will make those decisions easier by identifying products as biobased. These products have enormous potential to create green jobs in rural communities, add value to agricultural commodities, decrease environmental impacts, and reduce our dependence on imported oil. The BioPreferredSM program is now comprised of two parts: a biobased product procurement preference program for federal agencies and a voluntary labeling initiative for the broad-scale marketing of biobased products. The new USDA biobased product label indicates that a product has been independently certified to meet or exceed BioPreferred standards for biobased content (ASTM Test Method D6866). This new labeling will also promote the increased sale and use of biobased products. Federal agencies and their contractors are required to give preferential consideration to these designated products when making purchases. The new label will make identification of these products easier for Federal buyers and will increase awareness of these high-value products in other markets.



More than 20 Cortec® products have been awarded **USDA BioPreferredSM designation:**

- BioClean 610
- BioCorr®
- BioPad®
- BioWrap®
- EcoAir® BioCorr®
- EcoAir® 422
- EcoAir® 423
- EcoClean Disperant 600
- EcoLine® All Purpose Lubricant*
- EcoLine® Cleaner Degreaser
- EcoLine® CLP
- EcoLine® Cutting Fluid*

- EcoLine® Food Machinery Grease*
- EcoLine® Long Term RP
- EcoLine® 3220*
- EcoLine® 3690*
- EcoOcean™
- MCI®-2005
- S-14 Bio
- VpCI®-411* • VpCI®-422
- VpCI®-423

More detailed program information and additional resources are available at: www.biopreferred.gov

For more information, please contact Cortec® at 1-800-4-CORTEC.

^{*}Products for preferred purchasing by federal agencies.

Cortec® Laboratory 2011

ASTM's International

Cortec® Laboratory is listed in ASTM's International Laboratory Directory. The ASTM International Directory of Testing Laboratories is an on-line full text search for services and locations of testing laboratories. The information on the types of tests performed, specific tests performed, materials analyzed, or other services offered has been provided by the laboratories.

The benefits & features include:

Exposure to thousands of prospective customers

• ASTM receives about 400,000 visitors a month to their website; the Laboratory Directory gets about 3,000 specific hits each month.

Customers can contact the listing directly by e-mail or website link

Users can readily access the directories

- Free of charge
- No username/password

Multiple search capabilities:

- Specific text
- Specialized Search
- Geographic Region
- By Country
- By Specification

Art Ahlbrecht

Our colleague of twenty years, Art Ahlbrecht has turned in his resignation. We are not absolutely sure that he is "really" retired. He is still full of new ideas and enthusiastic about Cortec's future! We will miss you, Art!!

September 5, 2011

To: Boris

From: Art

"The time has come to say good-by to Cortec and focus on my health. It has been a long time since I showed up on your doorstep to help with the ISO 9001 program.

A year later I joined your staff and the new ideas and new products found their place along with the friends I have made along the way.

If all goes as planned we will become AZ residents in the next six months as living is easier in our AZ home we built six years ago.

I enjoyed writing the nominations and it will take a very good program to beat out Cortec's progress. Will wait and see. Hang in there, the 100 million dollar company is 6-8 years away... and 70-75 vears old isn't old any more".

What are the Major Laboratory Achievements for this Year?

- More than 20 new products most of which are biobased and/or biodegradable
- More than 250 tests finished for customers
- Two grants from the Government received and finished (about \$200,000)
- Eight papers submitted and presented at NACE, Eurocorr, Water Treatment Association conference, Material Performance magazine
- Laboratory ISO 17025 accreditation confirmed (1 year anniversary)
- More than 300 MSDSs in 10 languages created

And...

We have a newborn baby in our team!



Haley Shannon Congratulations Grandpa Rick!







