The Future of Corrosion Protection with Nature's Best!

BioCortec® Product Line - Derived From Sustainable Resources



ortec® Corporation, a world leader in innovative, green, sustainable technologies has spent years of dedicated research to introduce environmentally safe Bio-Cortec® range of corrosion control products. BioCortec® is a green response to hazardous oil derived corrosion preventatives and offers eco-efficient, compostable and biodegradable solutions made from sustainable materials. Utilizing new technologies Corteca is continuously developing biobased chemicals as a part of a social change in the 21st century and strives to encourage new generations to become environmentally responsible individuals.

For several decades now, scientists around the world have been alerting us about the importance of replacing synthetic chemicals that are among major causes of pollution on the planet, with green alternatives enabled by technological innovations. Thanks to committed research, study and experimentation, today in Cortec® we know more than ever before about producing ecologically harmonious corrosion control solutions. As technology advances, we continue to expand our unique earth friendly offerings. These products do not destroy the natural balance of the environment. are functionally superior to conventional petroleum derived products as well as cost efficient making them a far more economical solution.

BioCortec® products include:

Films and Bags - biodegradable
compostable; specifically

- designed to replace LDPE, LLDPE, and HDPE films.
- VpCI[®] Papers with multi-metal corrosion control; utilizing only the highest quality neutral/natural Kraft paper; fully recyclable, biodegradable, and compostable.
- EcoEarth™ providing corrosion protection for electronic and optical equipment and components.
- EcoAir[®] an air powered aerosol replacement to traditional chemical propellants.
- EcoLine[®] canola and soya based VpCI[®] technology.
- Foam Devices made from soy vegetable oils and bio-based fibers that enable corrosion protection by emitting VpCI[®] molecules that adsorbing onto metal surfaces.
- Migratory Corrosion Inhibitors (MCI[®]) - additives for concrete used to prevent corrosion of rebar; derived from sugar beets & soybeans.
- EcoOcean® biobased film and bags for marine biodegradable and anaerobic digestion markets.
- BioPouch™ powered by NANO-VpCI® technology, primarily made from agricultural by products is a revolutionary "green" Vapor phase Corrosion Inhibitor for the protection of metal parts.

Engine producers Volvo and Ford were experiencing corrosion problems during the exporting of automotive parts using sea going containers. Time in transit from manufacturer's location in Montenegro to the engine assembly plants is typically two to four months. The traditional

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rust inhibiting oils did not prevent oxidation and pitting of the special aluminum alloy used to produce these high-tech engine components. This resulted in significant losses from production delays and rejected parts. Based on laboratory tests, a pilot plant trial was initiated; which prompted the customer's decision to implement a plant-wide, full scale implementation of BioCortec®'s biodegradable, biobased EcoLine® Cutting Fluid to replace environmentally unacceptable rust inhibit-

ing oils. The customer's corrosion problems during storage and shipping were solved.

The bearings, bushings and thrust washers have shown no sign of corrosion, even after extended field testing up to twelve months. The important benefits are to be able to deliver parts that are oil free, dry to the touch, compatible with robotized assembly operations and an extremely cost effective corrosion protection method. EcoLine® Cutting Fluid enables our customer to demonstrate to their clients and local community their environmental sustainability and awareness.

Products in BioCortec[®] line conform to NACE RP 0487-2000, NACE TM0208-2008, MIL-I-22110C, MIL-PRF-3420G, ASTM D6400, DIN EN 13432, DIN V 54 900 standards and are RoHS compliant.

> For more information www.cortecbio.com





