



BIODEGRADABLE/ COMPOSTABLE PACKAGING TECHNOLOGIES





Cortec® Corporation is an ISO 14001:2004, ISO 9001:2008, and ISO/IEC-17025 certified manufacturer of over 400 environmentally preferable products, including our latest technologies in biodegradable/compostable films and bags. As sustainable packaging has become increasingly important, Cortec® has led the way, offering packaging films that bridge the gap between performance/usability and certified compostability.

State-Of-The-Art Production. Unparalleled ISO Quality Standards. High Performance Range of Products. Global Support and Availability.

We are proud of what we do and how we do it.



Certified Biodegradable/Compostable Packaging Technologies

All Compostable/ Biodegradable Films from Cortec®:

- Moisture resistant, heat stable and shelf stable
- Can be printed with a multitude of inks and processes
- Available in bulk roll stock for subsequent converting
- Customized to your precise needs: thickness, form, and packaging

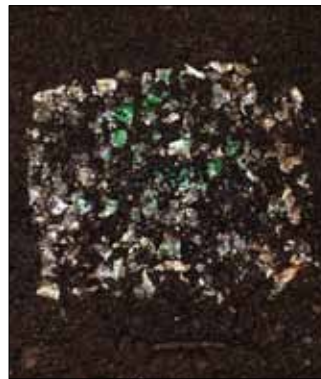


EcoWorks®

Compostable Films and Bags, US Patented No. 6,984,426

EcoWorks® is a range of formulations, not a single product and can be customized to your precise needs. It contains renewable raw materials, designed to replace traditional low density and high density films. EcoWorks® films will fully biodegrade into carbon dioxide and water within a matter of weeks.

- Certified Compostable per ASTM D6400 and EN 13432
- Renewable content
- Superior strength, shelf-life, and curb-life



EcoWorks® Resin

Compostable Resin for Film

EcoWorks® Resin is a proprietary blend of aliphatic and aromatic polyesters designed for compostable film extrusion applications. EcoWorks® also contains Ingeo™ Biopolymer, an annually renewable resource derived from plant sugars. Formulating with EcoWorks® Resin is customizable; it can be used as is or blended with other biodegradable materials and process additives to obtain desired properties. Films produced from EcoWorks® Resin are certifiable as 100% compostable per ASTM D6400 and EN 13432.

* Ingeo™ is a trademark of Nature Works LLC

- Composed of FDA approved ingredients
- Can be processed on traditional blown or cast film extrusion equipment





EcoWorks® AD

Biobased Film and Bags for Compost and Anaerobic Digestion Markets

EcoWorks® AD film and bags are constructed from the latest biobased polymer technology designed with the environment in mind. EcoWorks® AD film and bags are the first bioplastic product suitable for both commercial and backyard (low temperature) composting. EcoWorks® AD is anaerobically digestible and marine degradable, all without compromising on flexibility and strength!



- High renewable content: 77% biobased
- USDA BioPreferredSM certified
- BPI certified to meet ASTM D6400 for compostable plastics
- Marine biodegradable per ASTM D7081
- 100% anaerobically digestible per ASTM D5511



EcoOcean™

Biobased Film and Bags for Marine Biodegradable and Anaerobic Digestion Markets

EcoOcean™ film and bags are constructed from the latest biobased polymer technology. EcoOcean™ is designed to biodegrade in marine environments, anaerobic digestion, natural soil and water environments, backyard composting systems, and municipal composting facilities. EcoOcean™ can help reduce the increasing and persistent problem of marine litter. EcoOcean™ is heat, moisture, and chemical resistant making it an ideal film for compostable bags and many flexible film packaging applications.



- High renewable content: 77% biobased
- USDA BioPreferredSM certified packaging material
- BPI certified to meet ASTM D6400 for compostable plastics
- Marine biodegradable per ASTM D7081
- 100% anaerobically digestible per ASTM D5511



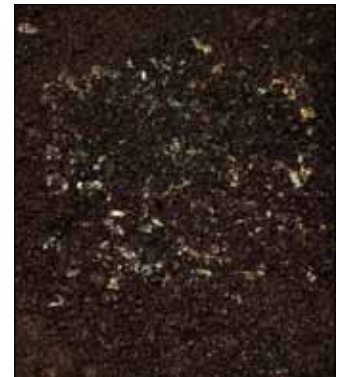
Eco Film® Compostable Film

EcoFilm® is designed to replace traditional nondegradable films such as low density and high density polyethylenes. It provides superior mechanical properties and stability in comparison to other compostable films on the market. EcoFilm® is available in a variety of sizes and constructions offering an environmentally friendly alternative for applications ranging from grocery bags to export shipping.

- Certified per ASTM D6400 and EN 13432
- Shelf and curb stable



100% BIODEGRADABLE



Eco Film® Cryogenic Extreme Low Temperature Packaging Material

Extreme Low Temperature Packaging Material Eco Film® Cryogenic is a Din Certco and BPI certified compostable and biodegradable packaging material specifically formulated for low temperature packaging. Eco Film® Cryogenic is a unique combination of strength, versatility and resiliency.

- Contains no polyethylene or additives
- Certified Compostable per ASTM D6400 and EN 13432
- Low MVTR, oxygen permeation rates



Eco Wrap® Tension Film

Eco Wrap is a unique combination of polyester film and a biodegradable cling coating. Eco Wrap® is more than a stretch film alternative, it can also be used for masking applications, mechanical protection, and corrosion protection. Eco Wrap® uses controlled adhesion to stick firmly to smooth surfaces, and leaves no residue upon removal.

- Certified Compostable EN 13432
- Works on most existing automated machines





BioCushion®

Biodegradable Air Cushion, US Patented No. 6,617,415

BioCushion® is a certified biodegradable air cushion for protective packaging applications providing an environmentally friendly alternative to traditional void fill materials. BioCushion® is available in different constructions, including biobased and VpCI® formulations, to meet your protective packaging needs. BioCushion® is designed for Cushion Fill Impact equipment manufactured by CPI Packaging Incorporated.

- Certified compostable per ASTM D6400 and EN 13432
- Superior mechanical properties
- Packaging material reduction compared to traditional void fill materials



100% Biodegradable
Product and Trademark of Cortec® Corporation
St. Paul, MN, USA

Eco-Corr®

VpCI® Film, US Patented No. 6,028,160

Eco-Corr® provides contact, barrier and Vapor phase Corrosion Inhibitor (VpCI®) protection. Metal parts packaged in Eco-Corr® receive continuous protection against salt, excessive humidity, condensation, moisture, aggressive industrial atmosphere and dissimilar metal corrosion.

- Certified compostable ASTM D6400 and EN 13432
- Provides better tensile strength, tear strength and ultimate elongation than low density polyethylene films.

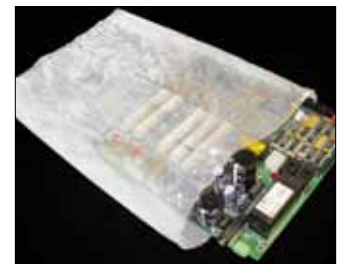


Eco-Corr® ESD

VpCI® Static Dissipative Film and Bags

Eco-Corr® ESD film utilizing Cortec's patented VpCI® technology along with eliminating static electricity. It provides contact, barrier, Vapor phase Corrosion Inhibitor (VpCI®) and anti-static protection

- Certified compostable ASTM D6400 and EN 13432
- Static Decay rate conformance to MIL-PRF-81705D



Eco-Tie®

Biodegradable Tie

Eco-Tie® is a high-strength, completely compostable per ASTM D6400 standards alternative to twine and metallic/plastic ties used in agricultural and industrial markets.



Buyers Guide

Product	Common Applications	Unique Properties	Base Chemistry	Appearance	Forms Available	Certifications Available	Tint	Heat Sealable	Shelf Stable	Moisture Proof
BioCushion® <i>Patented</i>	biodegradable air cushion for protective packaging applications for retail, crafts, medical, automotive, and consumer products	compostable per ASTM D6400, shelf and water stable, packaging material reduction	synthetic compostable polyester	silky, elastic	8" with perforations at 5" or 8", 12" with perforations at 5" (two tubes per perf), custom formulations	Din Certco, BPI	yes	yes	yes	yes
Eco Film®	collection bags, packaging film for retail items, and convertible films	soft, elastic, up to 300% stronger than LDPE	synthetic compostable polyester	silky, elastic	stock bags, retail packs, custom film, and master rolls	Din Certco, BPI	yes	yes	yes	yes
Eco Film® Cryogenic	high/low temperature, pouches, and films	soft, elastic, temperature stability, up to 300% stronger than LDPE	synthetic compostable polyester	silky elastic	custom film, bags, and master rolls	Din Certco, BPI	yes	yes	yes	yes
EcoOcean™	film is also marine protective and in the event that this product should reach the waterways it will biodegrade in months instead of remaining in the ocean for hundreds of years	USDA BioPreferred™ certified packaging material, BPI certified to meet ASTM D6400 for compostable plastics, marine biodegradable per ASTM D7081, 100% anaerobically digestible per ASTM D5511	synthetic compostable polyester	silky elastic	stock bags, retail packs, custom film, and master rolls	USDA BioPreferred, Din Certco, BPI	yes	yes	yes	yes
EcoWorks® <i>Patented</i>	collection bags, produce bags, handle bags, pouches, and convertible films	customized rigidity from slightly elastic to highly rigid, includes biobased raw materials (5-70%)	blend of bio and synthetic polyesters	slightly elastic (EcoWorks® 5) to highly rigid (EcoWorks® 70)	custom formulations, custom films, bags, and master rolls	Din Certco, BPI	yes	yes	yes	yes
EcoWorks® AD	film for community composting programs, anaerobic digestion programs, organic waste diversion, lawn and leaf bags, and retail packaging	USDA BioPreferred™ certified packaging material, BPI certified to meet ASTM D6400 for compostable plastics, marine biodegradable per ASTM D7081, 100% anaerobically digestible per ASTM D5511	blend of bio and synthetic polyesters	slightly elastic	custom formulations, custom films, bags, and master rolls	USDA BioPreferred, Din Certco, BPI	yes	yes	yes	yes
EcoWorks® Resin	potential applications for garbage and mulch bags, community composting programs, grocery bags, t-shirt bags, retail packaging	compostable by BPI according to ASTM D 6400, certified compostable per ASTM D6400 and DIN EN 13432 (all films produced from EcoWorks® Resin must be independently certified), composed of FDA approved ingredients	blend of aliphatic and aromatic polyesters designed for compostable film extrusion applications	pellets	custom formulations		NA	NA	NA	NA
Eco Wrap®	stretch film replacement for Agricultural shipments	stronger than many regular stretch films	synthetic compostable polyester	highly elastic	20" and 30" rolls, custom lengths	Din Certco	yes	yes	yes	yes
Eco-Tie®	replacement of twine, rope, string, and metal ties	heatsealable, adjustable rigidity	blend of bio and synthetic polyesters	slightly elastic to highly rigid	custom length spools	Din Certco, BPI	yes	yes	yes	yes
Eco-Corr® (VpCI®) <i>Patented</i>	corrosion preventative packaging, replace oil, and RP's	prevents corrosion for up to twenty-four months	synthetic compostable polyester	silky, elastic	stock bags, custom films, bags, shrouds, and master rolls	Din Certco, BPI	yes	yes	yes	yes
Eco-Corr® ESD (VpCI®)	corrosion and static protective packaging for electronics	prevents corrosion and static damage for up to twenty-four months	synthetic compostable polyester	silky, elastic	custom films, bags, shrouds, and master rolls	Din Certco, BPI	yes	yes	yes	yes

 Contains VpCI®  Custom Sizes



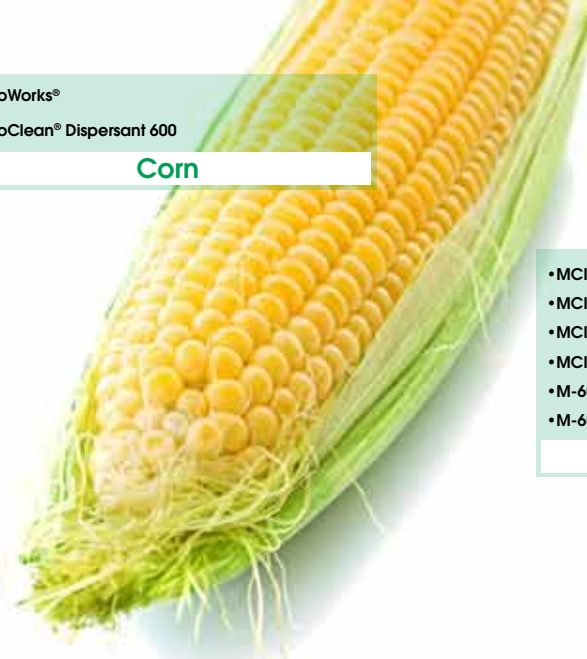


- VpCI®-411
- VpCI®-422/423

Orange Peel

- EcoWorks®
- EcoClean® Dispersant 600

Corn



- MCI®-2005
- MCI®-2005 NS
- MCI®-2006
- MCI®-2006 NS
- M-605 L
- M-605 PS

Sugar Beet



- BioClean-610
- BioClean Spray

Coconut Shell

- BioLube
- BioCorr™ RP
- EcoLine® All Purpose Lubricant
- EcoLine® Cutting Fluid
- EcoLine® Rust Preventative
- EcoLine® Bearing Chain and Roller Lubricant
- EcoLine® Cleaner/Degreaser
- EcoLine® Food Machinery Lubricating Grease
- EcoPrimer™
- VpCI®-629 Bio
- VpCI®-705 Bio
- S-14 Bio
- MCI® EcoCure

Soybean

- EcoLine® 3220
- EcoLine® 3690

Canola Seed



- VpCI®-641
- S-10 F

Coffee



Cortec® products derived from sustainable resources

Visit our websites for more information on Cortec® Corporation.

CortecVCI.com and CortecMCI.com

LIMITED WARRANTY

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4119 White Bear Parkway, St. Paul, MN 55110 USA
 Phone (651) 429-1100, Fax (651) 429-1122
 Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com

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