

# Eco-Corr® Biodegradable VpCI® Film, Patented



#### PRODUCT DESCRIPTION

Eco-Corr® is the first and only certified biodegradable corrosion inhibiting film. Eco-Corr® contains Cortec's proprietary VpCl technology and provides excellent contact, barrier and vapor-phase corrosion protection for ferrous and non-ferrous metals. Various formulations containing up to 40% biobased content are available and can be designed to fit required properties ranging from highly elastic to semi-rigid structures.

Eco-Corr® is certified 100% biodegradable and compostable by the Biodegradable Products Institute/ United States Composting Council (BPI/USCC) according to ASTM D6400. When placed in a typical commercial composting environment, Eco-Corr® films will fully biodegrade into carbon dioxide and water within a matter of weeks. There is no ecotoxicity to the soil, plants or microorganisms involved in this process. The exact time for films to biodegrade is dependent upon the conditions and activity of the disposal environment (temperature, soil quality, activity of microorganisms). Eco-Corr® films are shelf stable and will not break down prematurely until disposed of in a proper composting environment.



Eco-Corr® is patented under US patents 6,028,160 and 6,156,929.

# **Applications**

Metal parts packaged in Eco-Corr® receive continuous protection against salt, excessive humidity, condensation, moisture, aggressive industrial atmosphere and dissimilar metal corrosion. The Vapor phase Corrosion Inhibitors vaporize and then condense on all metal surfaces in the enclosed package. VpCI reaches every area of your part, protecting its exterior as well as hard to reach interior surfaces. You get complete product protection during storage as well as during domestic and overseas shipments, virtually eliminating any rust claims. Once the film is no longer needed, Eco-Corr® can be composted and will degrade into carbon dioxide and water within weeks, certified under BPS guidelines.

#### **FEATURES**

- The first and only 100% biodegradable, 100% compostable packaging film that provides contact, barrier and vapor corrosion inhibition
- Provides multimetal corrosion inhibitor protection
- Meets NACE TM0208-2008 standard for corrosion protection. Conforms to NACE Standard Recommended Practice RP0487-2000 Considerations in the Selection of Vapor Corrosion Inhibitors.
- Meets German TL-8135-002 standard for corrosion protection



VIA Test: Conforms to MIL-PRF-22019D

## **MECHANICAL PROPERTIES**

Property		Test Method	Units	Eco-Corr (40% bio- based content)	Eco-Corr (0% bio- based content)	VpCI-126
Caliper		ASTM D6988	mil	2.00	2.00	2.00
Breaking Factor	MD	ASTM D882-02	lbs/in	11.77	10.40	18.88
	TD			9.32	10.81	18.25
Tensile Strength at Break	MD	ASTM D882-02	psi	5774.65	4728.20	3184.35
	TD			4451.90	4699.10	3109.60
Elongation at Break	MD	ASTM D882-02	%	300.21	759.38	770.37
	TD			340.68	795.89	833.65
Yield Strength	MD	ASTM D882-02	psi	2321.62	991.44	793.85
	CD			2285.99	1093.16	1425.18
Tear Strength	MD	ASTM D1922-06a	mN	156.96	3719.95	15852.96
	CD			470.88	4959.94	20279.24
Dart Drop Impact Resistance		ASTM D1709-04, Test Method A	grams	573.30	>1300	753.28

<sup>\*</sup> Typical mechanical properties represent average laboratory values and are intended as guides only, not as specifications. Film properties are typical of blown film extruded at a blowup ratio of 2.5:1, but are dependent upon operating conditions.

• Complete replacement for non-degradable and inferior blend films

### **Packaging**

Eco-Corr® is available in standard sizes 36" (91.4cm) width x 500' (152,4 meters) length and 48" (122 cm) width x 500' (152,4 meters) length rolls, as well as a wide variety of custom sizes and forms. Custom products include single wound sheeting, double wound sheeting, U-sheets, M-sheets, center folds, gusset tubes, converted bags made from these types of film and perforated or bag-on-a-roll products.



Printing pattern for Eco-Corr®

#### **Shelf Life**

For shipping and storage applications, Eco-Corr® is a great alternative to conventional polyethylene films. Eco-Corr® has a shelf life of up to two years, when sealed in original packaging. Once removed and put to use, Eco-Corr® will remain effective with regard to mechanical strength until film is placed in contact with material containing microorganisms, such as certain types of waste, soil, and compost. Under these conditions, 100% disintegration will occur within a few weeks with no residual contamination of the soil.

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT MATERIAL SAFETY DATA SHEET FOR MORE
INFORMATION

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