

## Compostable Plastic Packaging Fit for Purpose and at Affordable Prices

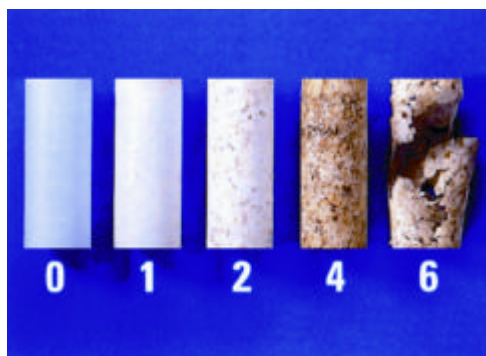
Compostable plastic that has the mechanical and barrier properties making it fit for use in a variety of applications and at a price that makes its use commercially feasible has arrived. All companies and especially those certified or gaining certification according to ISO-14001 should consider using fully compostable packaging products.

These compostable plastic films have been rapidly developed following focussed investment in research and development by Cortec Corporation of Minnesota. Cortec is well known as the pre-eminent manufacturer of environmentally acceptable VpCI technologies for packaging films that work time after time. Following significant and consistent investment of 10% of sales revenue into R&D over recent years the company is now vertically integrated with the capability to manufacture state-of-the-art films and papers.

Novel biodegradable resins have been taken by this innovative manufacturer of state-of-the-art film packaging products and developed into a unique family of compostable films under the *Eco-Film™* (Patent Pending) umbrella.

Cortec® has applied its sophisticated technical marketing organisation to determine customer's needs for Eco products and the result is a range of technical packaging solutions. *Eco Film™* has successfully attained certification under DIN 54 900 (compostability) and DIN 38412 Part 30 (ground water contamination) that proves the degradability, biodegradability and total compostability of the film.

As soon as *Eco Film™* comes into contact with microorganisms present in organic matter the degradation process commences. Although the effects of bio-degradation are observed visually within a couple of weeks, the film mechanical properties are maintained to ensure successful application. During a two month period, under standard compost conditions, the film completely biodegrades and carbon dioxide and water are released similar to the decomposition of other organic waste.



*Eco Film™*: Degradation, Biodegradation and Compostability in 6 weeks passing all three parts of DIN 54 900 (compostability) and DIN38412 Part 30 (ground water contamination).



The production of the biopolymer resin from sustainable agriculture and the manufacture of the **Eco Film™** range following ISO-14001 accredited procedures give the packaging world a commercial solution to the problem of plastic packaging waste. Since this polymer is not starch based, the mechanical properties of **Eco Film™** are excellent and are preserved in the presence of water, a degradation product of the biological process.

**Eco Film™** (Patent Pending) has the potential to lower costs because a lower film weight has the same mechanical properties compared with thicker conventional films: and stop paying for plastic disposal.

**Eco Corr®** (Patented) a VpCI compostable film, exhibits improved tensile strength, tear strength and ultimate elongation compared with LDPE films. It is heat and water stable and does not break apart while in use. Metal parts packaged in **Eco Corr™** film receive continuous protection against salt, condensation water, aggressive industrial atmospheres and dissimilar metal corrosion.

**Eco Wrap™** (Patent Pending) is a biodegradable and compostable tensioning film that works on existing automated machines by adjusting the tension setting. Handwrap film is also available. In masking applications **Eco Wrap™** uses controlled adhesion to stick firmly to smooth surfaces and leaves no residue when removed.

**Eco Film™ Cryogenic** (Patent Pending) specifically formulated for low temperature (food) packaging, exhibits a unique combination of strength, versatility and resiliency under low temperature conditions. The cryogenic film also has lower MVTR and oxygen permeation rates compared with LDPE.

**Eco Film™ Bags** (Patent Pending) are available for all types of compostable organic matter ranging from large agricultural operations to household kitchen and garden organic waste. This compostable plastic bag technology provides a platform for local government councils to re-launch household organic waste disposal into meaningful waste collection programmes.

Cortec Corporation continues to develop compostable technologies and is preparing to launch more exciting families of packaging technologies under the **Eco Works™** umbrella to fulfil the latent needs of our industries and communities world-wide.

More information can be obtained from Lake Chemicals and Minerals Ltd. by e-mail ([brian.coles@lakecm.co.uk](mailto:brian.coles@lakecm.co.uk)), fax (01527 830460) and telephone (01527 830459).

*Steven Cartlidge and Brian Coles of Technical Distribution Specialist Lake Chemicals and Minerals Ltd. are promoting environmentally acceptable technologies.*