



Provisional Product Data Sheet

Version 1.0

earth2earth® Compostable Film

29.04.2010

Product description

earth2earth® Compostable is our new biodegradable film product. It is basically a compound of our biodegradable copolyester and polylactic acid (PLA). Due to its outstanding mechanical strength earth2earth® Compostable offers a great down gauging potential needed for thin film applications like garbage bags, organic waste bags, T-shirt bags etc.

Our new earth2earth® Compostable exhibits the following properties compared to PE-LD:

- High strength, low-medium stiffness and high failure energy (dart drop)
- Good processability on conventional blown film lines, e.g. for PE-HD, PE-MD
- Down gauging to 8 µm possible, typical thicknesses: 10 . 120 µm
- Broad sealing window required for sealing layers of multi-layer film structures
- Weldable and printable in 8 colours by flexo printing
- Leaves only carbon dioxide and water and leaves NO harmful residues after degradation.
- **Contains no polyethylene**
- No Chemical additive to speed degradation
- Performs just like normal plastic bags but in a new innovative environmentally friendly way.
- Heat Distortion temperature is 75 °C (hot food ok)
- Waterproof
- Shelf life of two years

earth2earth® Compostable fulfils the requirements of the European standard DIN EN 13432 for compostable and biodegradable polymers, because it can be degraded by micro-organisms. The biodegradation process in soil depends on the specific environment (climate, soil quality, population of micro-organisms). The advantages for the customer concerning the certification of his products according to EN 13432 are:

- Biodegradable according to EN 13432
- Biobased according to ASTM D 6866

Storage

Temperatures during transportation and storage may not exceed 70 °C at any time. Storage time in an unopened box may not surpass 24 month at room temperature (23 °C).

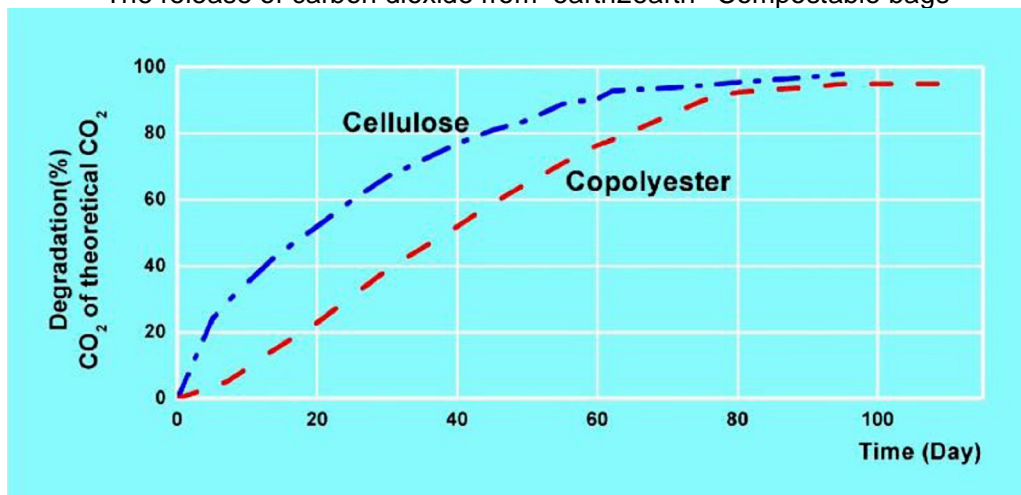
Quality Control

earth2earth[®] Compostable is produced as a standard material in a continuous production process according to DIN EN ISO 9001: 2000.

Applications

earth2earth[®] Compostable has been developed for the conversion to flexible films using a blown film process. Typical applications are packaging films, hygienic films, carrier bags and compost bags.

The release of carbon dioxide from earth2earth[®] Compostable bags



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