



Biodegradable and agro-based polymer usable for soft tube packaging production

Technology

This new material called BIOPOLEMBAL is fully agro-based and biodegradable thanks to its mix of PLA, PBS and PHA and some other agro based additives. It can be used for the soft tube packaging to replace Polyethylene (PE).

	BIOPOLEMBAL	POLYETHYLENE (LDPE/HDPE/coating)
Modulus of elasticity	300-590 MPa	379MPa
Elongation at break	300%-500%	473%
Oxygen permeability	6,7-11 cm ³ .mm/m ² .d.bar	169 cm ³ .mm/m ² .d.bar (LDPE)
Water permeability	31 - 40 g.mm/m ² .d.bar	4 g.mm/m ² .d.bar (LDPE)

Benefits

- Our patented material is a good option to replace the use of PE in the soft tube packaging:
 - Good barrier properties, notably for oxygen permeability
 - Production compatible with standard production line (extrusion)
 - Biodegradable
 - Agro-based

Applications

- Soft tube packaging for:
 - Cosmetics/beauty product
 - Food
 - Home care product



Keywords

- Flexible Tube
- Polylactic Acid - PLA
- Polybutylene Succinate - PBS
- Polyhydroxyalkanoate - PHA



Intellectual Property

French Patent FR1362793

Word patent WO2015092257



Development Status

Soft tubes of Biopolembal produced on a semi-industrial scale



Partnership

Licensing and/or partnership

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