

Biodegradable Polyester Compound specifically designed for film extrusion applications. This compound offers exceptional properties suitable for the production of mono- and multilayer films, with a recommended thickness range of 20-50 µm. Biodegradability in soil, certified according to EN 17033 standards (certified by DIN CERTCO)

Applications

Agricultural Applications
Multilayer
Monolayer

Sustainability

Bio-Based Content 100%
Compostability Home Compostable

Physical Properties

Density	1.28 g/cm ³	ISO 1183	
Melt Mass Flow Rate	2 - 5 g/10min	ISO 1133	(190°C/2.16 kg)

Mechanical Properties

Elongation at Break	400 %	ISO 527-3	Machine Direction
Elongation at Break	500 %	ISO 527-3	Transverse Direction
Tear Strength	150 MPa	ISO 6383	Machine Direction
Tear Strength	85 MPa	ISO 6383	Transverse Direction
Tensile Modulus	310 MPa	ISO 527-3	Machine Direction
Tensile Modulus	145 MPa	ISO 527-3	Transverse Direction
Tensile Strength	21 MPa	ISO 527-3	Machine Direction
Tensile Strength	21 MPa	ISO 527-3	Transverse Direction

Film Properties

Film Thickness	20 - 50 µm
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Processing Methods

Blown Film Extrusion
Extrusion
Film Extrusion

Extrusion Parameters

Cylinder Zone 1 Temp.	140 - 150 °C
Cylinder Zone 2 Temp.	140 - 150 °C
Cylinder Zone 3 Temp.	145 - 155 °C
Cylinder Zone 4 Temp.	150 - 160 °C
Die Temperature	150 - 160 °C
Transition	150 - 160 °C

Appearance

Opaque

Notes

Safety precautions:

- Processing at a melt temperature not higher than 165 °C
- Process with adequate room ventilation
- Smoke may occur when melt temperature is high (e.g. due to glycerine content) - lower melt temperature will lead to reduced smoke generation

Handling:

- Delivered with ready-to-use moisture content
- Keep package sealed until use
- Reseal opened package directly after use

Drying:

- In case the product becomes too humid, drying at 80 °C for 4 h by using a vacuum dryer or purging with dry air (dew point -35 °C)
- Recommended humidity below 0.2 %

Start-up:

- Purge with polyolefin with MFR = 4-7 g/10 min for ~10 minutes
- Lower the temperature to recommended settings
- Start transition while purging when the temperatures are within 10 °C of desired range

Extrusion equipment:

- Designed for standard extrusion lines
- Die gap: 0.5–1.6 mm
- Dual-lip air ring recommended, also IBC if possible
- Chilled air supply leads to more stable bubble on higher output rates

Interruption & shut-down:

- Never leave the product in the extruder for a longer period, e.g. over night
- By interruption for a considerable time, slow down screw speed to 5 rpm approx.
- For a longer period, please purge with same polyolefin from start-up procedure

Estimated Properties

Properties identified as 'Estimated**' have been estimated from the generic equivalent. These are provided for comparative purposes and are not reflective of the actual grade as the relevant data is not available.

Storage Recommendations

Keep dry at ambient temperature. Store indoors avoiding a humid environment, heat and direct sunlight. Use material within 6 months after delivery date, in order to prevent possible material quality deterioration.

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