



ALMABLEND® 400

Technical Data Sheet (06-2020)

General information

Product description

Almablend® 400 is a bioplastic from renewable, biodegradable and compostable raw materials, designed for cast film extrusion and thermoforming

Physical form

Pellets

Main characteristics

65% Poly-lactic acid
> 95% of biobased and inert materials
Compostable and bio based polymer
High thermal stability
Suitable for cast film extrusion and thermoforming
Suitable for direct food contact

Application

Cast film extrusion processes and thermoforming

Complies with

Plastics Regulation n. 10/2011
Food Contact Material Regulation (EC) n. 1935/2004

Designed in accordance with

European Standard 13432



Physical properties

Test Method

Density	ISO 1183	1,39 g/cm ³
Melt Flow Rate	g/10 min (230°C / 2.16 Kg)	10-20 g/10min
Melting Temperature	Differential scanning calorimetry	172-178 °C
Glass Transition Temperature	Differential scanning calorimetry	59 °C

Mechanical properties

Test Method

Tensile Modulus	ISO 527-1	2380-2630 MPa
Elongation at break	ISO 527-1	90-110%
Tensile Strength	ISO 527-1	48 MPa
Heat deflection temperature (amorphous)	ISO 75	65-70°C
Heat deflection temperature (crystalline)	ISO 75	>90°C
Charpy Impact Strength	ISO 179	3,8 kJ/m ²

Drying and storage recommendations

Temperature during transportation and storage must not exceed 50 °C. Storage in direct sunlight should be avoided and time in an unopened bag may not surpass 12 month at room temperature (23 °C). Pre-drying of the resin is strongly recommended before processing. Pre-drying conditions 50 °C for at least 5 h.



Recommended processing temperatures:

Feed Zone: 150 °C – 160 °C

Mixing-Conveying Zone: 180 °C – 200 °C

Die Head temperature: 180 °C – 200 °C

The information contained in this technical data sheet have only informative purpose and are provided as a guide for the processing and storage of the material. Values listed are referred to the polymer in semi-crystalline state. Such information may not be applicable if the material is incorrect handling and/or storage.