Technical data sheet (PLA - Pellets)

Biopolymer Polylactic Acid

Description

Eolas Prints PLA Premium filament is high quality 3D printing filament that exhibits faster crystallization rates and can develop improved heat resistance in 3D printed parts. This grade of PLA demonstrates the best performance in formulated systems designed to improve toughness or heat resistance. This filament has excellent 3D printing characteristics, such as precise details, good adhesion to build plates, and less warping.

It is suitable to produce food packaging in accordance with the criteria of Regulation (EU) No. 10/2011 and compatible with EN 1343 models.

Material Properties

Density	1.24 g/cm^3 ISO 1183-1
Chemical Name	Polylactic Acid

Mechanical Properties

Tensile strength	51 MPa	ISO 527-1
Young's modulus	3.7 GPa	ISO 527-1
Tensile elongation @ break	≤ 6%	ISO 527-1
Charpy Impact Resistance of Notched 23˚C	≤ 5 kJ/m^2	ISO 179-1eA

Thermal Properties

HDT B	60˚C
Vicat	80˚C

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Drying

The materials aren't pre-dry.

Drying conditions:

Temperature	80˚C – 85˚C
Time	Min. 5 hours – Max. 8 hours
Air Flow	>1.5 m^3/min per kg/h
Dew point	< -40˚C
Residual Moisture Contents	< 0.02% (200ppm)

Storage & Handling

During storage, the product may acquire humidity if exposed to fresh air. The humidity it absorbs depends on the temperature, humidity, and time of exposure. Therefore, it should be store in its packaging in a cool place and keep at temperatures below 50˚C. No special restrictions on storage with other products.

Security

This product is not classified as dangerous according to the CE Regulation No 1272/2008, and therefore is not subject to special transport regulations. This product does not melt at room temperature.

Suitable for food contact	Yes (EU) 10/2011
Suitable for Toys	Yes
Suitable for packaging	Yes

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