

## TECHNICAL DATA SHEET

### PLA Purifier

#### Description

Recreus PLA Purifier is a compound based on polylactic acid and belongs to the family of thermoplastic polyesters derived from renewable resources which includes an innovative component that mineralises VOCs generated by air pollution. These come from the fermentation of agricultural by-products such as cornstarch or other carbohydrate-rich. An ideal filament for extrusion in FDM 3D printers.

Physical Property	Value	Unit	Test method according to
Material density	1,42	g/cm <sup>3</sup>	ISO 1183
Mechanical Property	Value	Unit	Test method according to
MEF Flexural Modulus Elasticity	3000	MPa	ISO 178
Tensile modulus (Young)	3060	MPa	ISO 527
Tensile strength	12,6	MPa	ISO 527
Elongation at break	36	%	ISO 527
Notched impact strength (Charpy)n at +23°C	6,3	kJ/m <sup>2</sup>	ISO 179
Notched impact strength (Charpy)n at -30°C	4,5	kJ/m <sup>2</sup>	ISO 179
Izod impact strength (23°C notched)	NR	kJ/m <sup>2</sup>	ISO 179
Thermal Property	Value	Unit	Test method according to
HDT (01,82MPa)	45	°C	ISO 75-2

Printing properties	Recommended
Printing temperatures	215 - 225°C
Printing speed	20 - 100 mm/s
Hot-bed temperature	40-60°C
Optimal layer height	0.2 mm
Minimal nozzle diameter	0.1 (0.4 mm or higher recommended)
Retraction parameters	3.5 - 6.5 mm (speed 20 - 160 mm/s)