Bio-Based Flexible EVA Pellet

SKU: GR605EVA-BIO

Xtellar bio-based EVA resin is the industry's first sustainable flexible material derived from raw sugar cane. This formulation provides a sustainable alternative to some traditional flexible TPE & TPU materials available on the market. This eco-friendly formulation delivers a unique combination of sustainability, flexibility, ductility, lightweighting, and moisture resistance. Xtellar bio-based EVA pellets expands the availability of sustainable materials for use in 3D printing applications such as: consumer, packaging, and industrial markets.

Recommended Print Seetings

Parameter	Units	Range
Extruder Temperature		
Nozzle	℃	200
Zone 3	℃	190
Zone 2	℃	180
Zone 1	℃	170
Build plate Material		Polypropylene Sheet (0.5 in thick)
Printing Speed (First layer)	mm/min	3,000 – 4,000 (50%)

Note: Optimal printing conditions are dependent on the printer being utilized and will vary between machines. These recommended conditions are intended to serve as a starting point and therefore may require further adjustments and optimization. No pre-drying of pellets required.

Printed Part Properties

Parameter	Method	Units	Value
Density	ASTM D 792	g/cm^3	0.94
Hardness	ASTM D 2240	Shore A	89
Tensile Strength at Break	ASTM D 638	MPa	19
Tensile Elongation at Break	ASTM D 638	%	750
Young's Modulus	ASTM D 638	MPa	78
Flexural Modulus – Chord Modulus	ASTM D790	MPa	50
Vicat Softening Temperature (at 10 N)	ASTM D 1525	℃	61

Notes

1. Recommended process conditions and printed part properties may be changed at any moment without previous communication from Xtellar.
2. Traditional bed adhesive solutions used for PLA & ABS (such as blue tape or hair spray) will not properly adhere PP, PE, or EVA to the build plate.
3. This resin does not contain the substance Bisphenol A (BPA, CAS: 80-05-7) in its composition.
4. For information on about safety, handling, individual protection, first aids and waste disposal, please see SDS. In case of questions regarding utilization or regulatory information, please contact our technical assistance area.