

## NonOilen<sup>®</sup> Pellets

Mechanical properties	Typical Value	Test Method	Test Condition
Tensile strength at yield	40 MPa	ISO 527	50 mm/min
Tensile strength at break	34 MPa	ISO 527	50 mm/min
Elongation at break	9 %	ISO 527	50 mm/min
Tensile modulus	1900 MPa	ISO 527	50 mm/min
Flexural strength	-	ISO 178	
Flexural modulus	-	ISO 178	
Hardness	71 Shore D	ISO 7619	
Charpy impact strength	26 kJ/m <sup>2</sup>	ISO 179	unnotched
Abrasion resistance	-		

Thermal properties	Typical Value	Test Method	Test Condition
Melting temperature	171 °C	ISO 11357	
Glass transition temperature	50 °C	ISO 11357	
Melt flow index	10 g/10 min	ISO 1133	180 °C, 2.16 kg
Vicat softening temperature	150 °C	ISO 306	
Flame classification	-	UL 94	
Temperature resistance	115 °C		

Chemical properties	Typical Value
Polymer base	Blend of polylactic acid and polyhydroxybutyrate
Good chemical resistance	Water, alcohols
Low chemical resistance	Acetone, acids, bases

Other properties	Typical Value	Test Method	Test Condition
Material density	1.25 g/cm <sup>3</sup>	ISO 1183	
UV stability	No		
Electrical volume resistivity	10 <sup>16</sup> Ω·cm		
Food contact	Yes		
Biodegradability	No		
Transmittance	No		



#### Package size:

- 1 kg
- 5 kg
- 15 kg

#### Features:

- 100% natural origin
- Biodegradable in industrial composter
- Natural silk look
- High strength and hardness
- Temperature resistance up to 115 °C

Workability of 3D printing filament is at least 12 months from delivery.

This material can be used to produce electrical and electronic equipment. It doesn't contain restricted substances.

The information was processed with the best knowledge of the manufacturer, and it is for information only.