



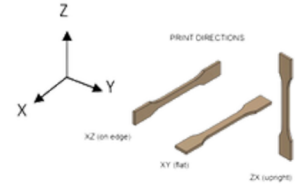
AURA PLA



Material class: Polylactic Acid

Easy Printing & High Surface Finish

- High speed: 16 mm³/s (150mm/s)



Property	Method	Units	Value XZ** (on edge)	Value ZX** (upright)
Mechanical properties				
Tensile Modulus	ISO 527 Type 1BA	MPa	3200	2800
Tensile Strength at yield	ISO 527 Type 1BA	MPa	60	no yield
Tensile Strength at break	ISO 527 Type 1BA	MPa	53	44
Elongation at yield	ISO 527 Type 1BA	%	2.3	no yield
Elongation at break	ISO 527 Type 1BA	%	3.1	3.0
Flexural Modulus	ISO 178	Mpa	3250	2840
Flexural Stress at break	ISO 178	Mpa	61	51
Flexural Strain at break	ISO 178	%	4.7	22.4
Impact Strength	ISO 180	J/m		
Impact Strength	ISO 180	kJ/m2		

** XZ/ZX Bars cut out of 3D printed plates on edge and in Z direction printed according to guidelines



Property	Method	Units	Value
Thermal properties			
Glass transition temperature (Tg)	ISO 11357-1	°C	55-60
Melting temperature	ISO 11357-3	°C	145-160
Vicat softening temperature	ISO 306/B50	°C	
Temp. of deflection under load (1.80 Mpa)*	ISO 75-1/-2	°C	
Temp of deflection under load (0.45 Mpa)*	ISO 75-1/-2	°C	
Physical properties			
Filament diameter (+/- 0.05 mm)		mm	1.75/2.85
Density	ISO 1183-1	g/cm3	1.24
Humidity absorption (70 °C, 62% r.H.)*	ISO1110	%	
Water absorption (23 °C saturated)*	ISO 62	%	

* Injection moulding data



Recommended processing conditions

Nozzle temperature	Recommended 205 °C (180 °C - 220 °C)
Bed temperature	Recommended 60 °C (20 °C - 60 °C)
Chamber temperature	Recommended 23 °C
Bed material	(Textured) PEI Sheet, Glass, Carbon Fiber Plate
Adhesion promoter	Magigoo Original
Nozzle diameter	≥ 0.4mm
Print speed	Recommended: 80 mm/s (20-150 mm/s)
Max. volumetric speed (high speed)	16mm ³ /s (150mm/s)
Drying instructions filament	N/A

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