

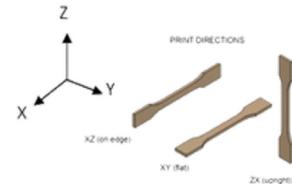


AURA ASA+

Material class: Acrylonitrile Styrene Acrylate

Low Warping & High Speed Printing

- High speed: 21 mm³/s (200mm/s)
- Excellent bed adhesion
- Outstanding UV resistance



Property	Method	Units	Value XZ** (on edge)	Value ZX** (upright)
Mechanical properties				
Tensile Modulus	ISO 527 Type 1BA	MPa	1450	1340
Tensile Strength at yield	ISO 527 Type 1BA	MPa	26.3	15.8
Tensile Strength at break	ISO 527 Type 1BA	MPa	16	15
Elongation at yield	ISO 527 Type 1BA	%	3.7	1.7
Elongation at break	ISO 527 Type 1BA	%	7.4	1.7
Flexural Modulus	ISO 178	Mpa	1280	1040
Flexural Stress at break	ISO 178	Mpa	50	38
Flexural Strain at break	ISO 178	%	4.7	2.9
Impact Strength	ISO 180	J/m		
Impact Strength	ISO 180	kJ/m ²		

** 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	100
Melting temperature	ISO 11357-3	°C	
Vicat softening temperature	ISO 306/B50	°C	
Temp. of deflection under load (1.80 Mpa)*	ISO 75-1/-2	°C	56
Temp of deflection under load (0.45 Mpa)*	ISO 75-1/-2	°C	80
Physical properties			
Filament diameter (+/- 0.05 mm)		mm	1.75/2.85
Density	ISO 1183-1	g/cm3	1.07
Humidity absorption (70 °C, 62% r.H.)*	ISO1110	%	0.35
Water absorption (23 °C saturated)*	ISO 62	%	1.63

* Injection moulding data



Recommended processing conditions

Nozzle temperature	Recommended 250 °C (240 °C - 260 °C)
Bed temperature	Recommended 90 °C (50 °C - 90 °C)
Chamber temperature	Recommended 23 °C (23 °C - 60 °C)
Bed material	(Textured) PEI Sheet
Adhesion promoter	Magigoo Original
Nozzle diameter	≥ 0.4mm
Print speed	Recommended: >80 mm/s (20-250 mm/s)
Max. volumetric speed (high speed)	21mm ³ /s (200mm/s)
Drying instructions filament	60 °C for 2-3 hours

All information supplied by or on behalf of Tectonic3D in relation to its products, whether in the nature of data, recommendation or otherwise, is supplied by research and, in good faith, believed reliable, but Tectonic3D assumes no liability and make no warranties of any kind, express or implied, including but not limited to, those of title, merchantability, fitness for a particular purpose or non- infringement or any warranty arising from a course of dealing, usage or trade practice whatsoever in respect of application, processing or use made of aforementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequences from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications. Copyright © Tectonic3D 2022. All rights reserved.

