

Nexa3D Xyon TECHNICAL DATA SHEET

NEXA3D XYON

Designed as a one-to-one, drop-in replacement material for Markforged® Onyx® 3D printing filament. Xyon's seamless compatibility with existing setups ensures a smooth transition, making it valuable addition to any 3D printing toolkit. Xyon is a versatile and cost-effective filament designed for various 3D printing applications.

MATERIAL PROPERTIES			
Metric	Test Method	Nexa3D Xyon	Markforged Onyx
Tensile Strength at Yield, MPa	ASTM D638 Type IV	40.7 (2.4)	36 (1)
Elongation at Break, %	ASTM D638 Type IV	15.2 (3.1)	30 (5)
Youngs Modulus, GPa	ASTM D638 Type IV	1.6 (0.2)	0.98
Flexural Strength, Mpa	ISO 178	58 (4.0)	60 (3.0)
Flexural Modulus, GPa	ISO 178	1.6	2.0
Notched Izod Impact strength, J/m	ASTM D256	234 (22)	280 (50)
HDT B, °C	ASTM D648	135	143
Density, gm/cm ³	ASTM D792	1.10	1.10

Standard deviation listed in paranthesis

PRINT PARAMETERS USED FOR SPECIMENS	
Printer	Markforged Onyx Pro®
Infill	100%, solid infill
Layer Height	0.125mm
No of Contours	2
Orientation	45/45
Specimen Conditioning Time	>48 hrs at 23±2C and 50 ± 10 % RH

