

Technical Data Sheet: **AON3D ABS** - 3D Printing Filament

Specifications

Filament Size:	1.75 mm	0.0689 in
MIN Diameter:	1.72 mm	0.0677 in
MAX Diameter:	1.78 mm	0.0701 in
Tolerance Standard Dev. Ovality	+/- .03 mm	+/- 0.0012 in

Printed Specimen Conditions

Printer: FDM/FFF	Infill: 100%, +/-45°	Specimen Orientation: XY Flat
Nozzle: 0.4 mm	Extrusion Temp: 240°C	Unannealed
Layer Height: 0.25 mm	Bed Temp: 90°C	

Certifications

ROHS compliant to (2011/65/EU) Annex II, recasting 2002/95/EC
NSF/ANSI 51 Food Equipment Materials
UL / C-UL Certified Yellow Card E302314

Physical Properties	Typical Value	Standard
Specific Gravity - Density	1.05 g/cm ³	ASTM D792
Melt Density @220°C, 10KG	22 g/10 min	ASTM D1238
UL Flammability Class. @1.14mm	94HB	UL 94

Mechanical Properties

Tensile Yield Strength	49 MPa	ASTM D638
Tensile Modulus	2350 MPa	ASTM D638
Tensile Elongation	30 %	ASTM D638
Flexural Stress	78 MPa	ISO 178
Notched Izod Impact	225 J/m	ASTM D256
Shrinkage Rate < 1%	0.40 - 0.70% mm/mm	ASTM D955

Thermal Properties

Glass Transition Temperature (Tg)	95°C	DSC
Heat Distortion Temp @ 0.45MPa	85°C	ASTM D648
Decomposition Temperature	N/A	ASTM 3418

Disclaimer

The technical data contained on this data sheet is furnished without charge or obligation and accepted at the recipient's sole risk. This data should not be used to establish specifications limits or used alone as a basis of the design. The data provided is not intended to substitute any testing that may be required to determine fitness for any specific use.