

Technical Data Sheet

Product Name: IC3D TPU 70D

Revision Date: 11/15/19



Product Name:

IC3D TPU 70D

Supplier Details:

IC3D, Inc
1697 Westbelt Drive
Columbus, Ohio 43228
614-344-0414

Product Type: Polyether Thermoplastic Polyurethane (TPU)

Features:

- Low temperature flexibility, high transparency, and UV stability

Applications:

- 3D printing using Fused Filament Fabrication (FFF) technology

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	70	Shore D	ISO 868
Specific Gravity	1.12	g/cm ³	ISO 2781
Tensile Strength (XY)	28	MPa	ISO 527
Ultimate Elongation (XY)	320	%	ISO 527
Tensile Stress at (XY):			
- 100 % Elongation	20	MPa	ISO 527
- 300 % Elongation	28	MPa	ISO 527

- Filament dried at 70°C during 2h in a convection oven prior to printing
- Printing conditions: MakerBot Replicator, extrusion temp = 250°C, base = 100°C, speed = 100mm/s
- Prior to testing, samples were conditioned at 23°C for 48 hours

Supply Form and Standard Packaging

IC3D TPU 70D is delivered in filament form. IC3D filament should be stored in a temperature-controlled environment within a sealed container along with desiccant to best preserve material properties.

Recommended Strand Extrusion Conditions:

IC3D TPU 70D can be processed on any conventional extruder.

	°C
Zone 1	200
Zone 2	205
Zone 3	210
Zone 4	215
Die	220

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