

DuPont™ Hytel® 3D4000FL NC010

High Performance Material for 3D Printing

Developmental Data

Product Information

Hytel® 3D4000FL NC010 is a thermoplastic elastomer material in filament form for fused filament fabrication.

Material Specific Properties	Value	Unit	Test Standard
Density	1.16	g/cm ³	ISO 1183
Melting Temperature, 10°C/min	150	°C	ISO 11357-1/-3
Vicat Softening Temperature, 50°C/h, 10N	105	°C	ISO 306
Hardness, Shore D (max)	40	-	ISO 868

Typical Properties of Printed Parts	Flat	Vertical	Unit	Test Standard
Tensile Stress at Break	19	13	MPa	ISO 527 (Type 1BA)
Tensile Stress at 10% Strain	4	4	MPa	ISO 527 (Type 1BA)
Tensile Stress at 50% Strain	7	7	MPa	ISO 527 (Type 1BA)
Nominal Strain at Break	≥ 500	≥ 300	%	ISO 527 (Type 1BA)
Tensile Modulus	50	50	MPa	ISO 527 (Type 1A)
Izod Impact - Notched	No Break	No Break	kJ/m ²	ISO 180/1A
Izod Impact - Unnotched	No Break	No Break	kJ/m ²	ISO 180/1U

The above data are for the developmental sample and are subject to change.

DuPont Hytel® 3D4000FL is capable of being printed on a variety of printers in a variety of configurations. Different printers, slicing and/or printing configurations, test conditions, ambient environments, etc. may give different results.

Reported above are typical results obtained from test parts prepared using the following direct-drive printer settings: Nozzle Temperature: 230-250°C; Bed Temperature: 40°C; Printing Speed: 15 mm/sec; Cooling Fan: 100%; Infill: 100% Diagonal Line; Flow: 100%; Retraction Speed: 10 mm/sec; Retraction Distance: 1 mm; Printing Orientation: Flat and Vertical.

Test specimens were conditioned for >40 h at 23°C and 50% relative humidity prior to testing. The tests were then run under these same conditions.

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