



TDS Rev 1.0

Technical Data Sheet: CX18 COEX-FLEX TPE 40D SERIES 3D PRINTING FILAMENT

BASE RESIN: DuPont Hytrel

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

Mechanical Properties	Standard	Unit	Typical Value
Tensile Stress @ Break FLAT / VERT.	ISO 527 Type 1BA	MPa	19 / 13
Tensile Modulus	ISO 527 Type 1A	MPa	50.0
Nominal Strain @ Break FLAT / VERT.	ISO 527 Type 1BA	%	≥ 500 / ≥ 300
Tensile Stress @ 50%	ISO 527 Type 1BA	MPa	7
Notched & Unnotched Izod Impact	ISO 180/1A	J/m	No Break
Shrinkage Rate < 0.5%	ISO 294-4	mm/mm	0.20 – 0.40%

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	ISO 11357-2	°C	-50.0
Melt Temperature		°C	152
Drying Temperature @ 3 hours		°C	80

SPECIFICATIONS				
Filament Size:	1.75mm	0.0689 in	2.85mm	0.1122 in
MIN Diameter:	1.72mm	0.0677 in	2.79mm	0.1098 in
MAX Diameter:	1.78mm	0.0701 in	2.91mm	0.1146 in
Tolerance				
Standard Dev.	+/- .03mm	+/- 0.0012 in	+/- .06mm	+/- 0.0024 in
Ovality				

ADVANTAGES
Resilient, Flexible, Heat Resistant, Chemical Resistant, Strong, Durable
Contains up to 60% renewably sourced materials from biomass
Combines the flexibility of rubber with the strength and processability of thermoplastics

Printed Specimen Conditions
Printer: Open Source FDM/FFF
Nozzle: 0.4mm
Layer Height: 0.25mm
Infill: 100%, +/-45°
Extrusion Temp: 205 - 250°C
Bed Temp: 40°C
Specimen Orientation: XY Flat and Vertical
Printing Speed 15mm/sec..

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