



TDS Rev 2.0

Technical Data Sheet: CX06 HIPS 3D PRINTING FILAMENT

BASE RESIN: AmSty Styron 484 High Impact Polystyrene

Physical Properties	Standard	Unit	Typical Value
Specific Gravity - Density	ASTM D792	g/cc	1.04
Melt Flow index (200°C/5 Kg)	ASTM D1238	g/10 min	2.8
UL Flammability Class. @1.14mm	UL 94	N/A	94HB

Mechanical Properties	Standard	Unit	Typical Value
Tensile Yield Strength	ASTM D638	MPa	27
Tensile Modulus	ASTM D638	MPa	1900
Tensile Elongation	ASTM D638	%	65
Flexural Stress	ISO 178	MPa	36
Notched Izod Impact	ASTM D256	J/m	112
Shrinkage Rate < 1%	ASTM D955	mm/mm	.0004

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	DSC	°C	88
Heat Distortion Temp @ 0.45MPa	ASTM D648	°C	89
Decomposition Temperature	ASTM 3418	°C	390

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				

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

3/11/20

www.coex3d.com

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 the basis of design. The data provided is not intended to substitute any testing that may be required to determine fitness for any specific use.