

## Technical data sheet – PC 3D filament

Printing features	Parameters
<b>Extrusion temperature</b>	Between 255 and 270°C
<b>Bed temperature</b>	Between 85 and 105°C
<b>Bed type</b>	Glass, micro-perforated metal
<b>Bed surface treatment</b>	ABS/Ketone, raft on micro-perforated, BuildTak
<b>Chamber temperature</b>	80°C
<b>Ventilation</b>	≈ 20%
<b>Printing speed</b>	Around 30 mm/s
<b>Retraction speed</b>	36 mm/s
<b>Retraction distance</b>	1.2 mm
<b>Printing difficulty level</b>	Confirmed to professional

Based on use on Zortrax M200 Plus and Z-Suite 2.8.3.0. Printing may vary between printers and printheads

### **THESE VALUES ARE INDICATIVE AND MAY VARY**

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PROPERTY	UNIT	ASTM METHOD	TYPICAL DATA
<b>PHYSICAL</b>			
Specific Gravity	-	D792	1.20
Water Absorption (24 hours at 23°C)	%	D570	0.15
Melt Flow Rate (300°C, 1.2kg)	g/10min	D1238	2
<b>MECHANICAL</b>			
Tensile Strength at yield	kg <sub>f</sub> /cm <sup>2</sup>	D638	710
Tensile Elongation at break	%	D638	100
Flexural Strength at yield	kg <sub>f</sub> /cm <sup>2</sup>	D790	920
Flexural Modulus	kg <sub>f</sub> /cm <sup>2</sup>	D790	21,000
Izod Impact Strength, notched, 23°C (1/8")	kg <sub>f</sub> ·cm/cm	D256	85
Rockwell Hardness	R scale	D785	
<b>THERMAL</b>			
HDT, 18.6 kg <sub>f</sub> /cm <sup>2</sup>	°C	D648	132
Coefficient of Linear Thermal Expansion	mm/mm/°C	D696	5~7 x 10 <sup>-5</sup>
<b>ELECTRICAL</b>			
Volume Resistivity	Ω·cm	D257	4 x 10 <sup>16</sup>
Dielectric Strength	kV/mm	D149	30
Dielectric Constant	-	D150	
Dissipation Factor	-	D150	
ARC Resistance	sec	D495	120
<b>OTHERS</b>			
UL-94 Flammability (1/16" thickness)	-	(UL 94)	V-2
Haze		D1003	0.4

SPECIFICATION	UNIT	CONDITIONS
Drying Temperature	°C	120
Drying Time	hr	3 ~ 5
Moisture Content, Max	%	0.02
Melt Temperature	°C	265 ~ 300
Nozzle Temperature	°C	265 ~ 300
Front Temperature	°C	265 ~ 290
Middle Temperature	°C	250 ~ 275
Rear Temperature	°C	235 ~ 260
Mold Temperature	°C	65 ~ 105
Back Pressure	MPa	0.25 ~ 0.7
Screw Speed	rpm	40 ~ 70
Vent Depth	mm	0.02 ~ 0.08