



Reprappertech Plastic Tech

3D Printing Filament Datasheet

Document Revision 2.0
Release Date : Jan, 2015



Document Revision 2.0
Release Date : Jan, 2015

Name	Parameter	Data	Conditions
ABS	Density	1.05g/cm ³	23°C
	Melting Index	1.8	200°C 5Kg
	Melting Point	200°C	
	Decomposition Temperature	>260°C	
	Recommended Printing Temperature	230±10 °C	
	Thermal Distortion Temperature	88°C	
	Tension speed	6mm/min	
	Impact Strength	18 Kg-cm/cm	
	Ultimate elongation	20%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
PLA	Density	1.24g/cm ³	23°C
	Melting Index	-	-
	Melting Point	160°C	
	Decomposition Temperature	>230°C	
	Recommended Printing Temperature	200±10°C	
	Thermal Distortion Temperature	70°C	
	Tension speed	6mm/min	
	Impact Strength	-	
	Ultimate elongation	145%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	



Document Revision 2. 0
Release Date : Jan, 2015

Name	Parameter	Data	Conditions
Nylon	Density	1.14	g/cm ³ , 23°C
	Melting Index	98	-
	Melting Point	224°C	
	Decomposition Temperature	> 280°C	
	Recommended Printing Temperature	250±10°C	
	Thermal Distortion Temperature	160°C	4.6kgf/cm
	Tension speed	6mm/min	
	Impact Strength	50Kg-cm/cm	
	Ultimate elongation	200%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
HIPS	Density	1.05g/cm ³	
	Melting Index	5.5g/min	200°C 5Kg
	Melting Point	200°C	
	Decomposition Temperature	> 280°C	
	Recommended Printing Temperature	230±10°C	
	Thermal Distortion Temperature	88°C	
	Tension speed	6mm/min	
	Impact Strength	11Kg-cm/cm	
	Ultimate elongation	40%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
PETG	Density	1.27	g/cm ³ , 23°C



Document Revision 2. 0
Release Date : Jan, 2015

	Melting Index	-	-
	Melting Point	200°C	
	Decomposition Temperature	> 280°C	
	Recommended Printing Temperature	230±10°C	
	Thermal Distortion Temperature	70°C	
	Tension speed	6mm/min	
	Impact Strength	100Kg-cm/cm	
	Ultimate elongation	140%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
Flex	Density	0.96	
	Melting Index	-	-
	Melting Point	165°C	
	Decomposition Temperature	210°C~260°C	
	Recommended Printing Temperature	210±10°C	
	Thermal Distortion Temperature		
	Tension speed	6mm/min	
	Impact Strength	-	
	Ultimate elongation	600%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
Wood	Density	0.93g/cm ³	
	Melting Index		
	Melting Point	200°C	



Document Revision 2.0
Release Date : Jan, 2015

	Decomposition Temperature	>270°C	
	Recommended Printing Temperature	200±10°C	
	Thermal Distortion Temperature	80°C	
	Tension speed	6mm/min	
	Impact Strength		
	Ultimate elongation	40%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
PC	Density	1.2	g/cm ³
	Melting Index	6.0cm ³ /min	
	Melting Point	>200°C	
	Decomposition Temperature	>300°C	
	Recommended Printing Temperature	250±15°C	
	Thermal Distortion Temperature	142°C	
	Tension speed		
	Impact Strength	-	
	Ultimate elongation	120%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
POM	Density	1.38	g/cm ³
	Melting Index	190°C/2.16 kg 12g/10 min	
	Melting Point	175°C	
	Decomposition Temperature	>220°C	
	Recommended Printing Temperature	200±10°C	



Document Revision 2.0
Release Date : Jan, 2015

	Thermal Distortion Temperature	85°C	
	Tension speed		
	Impact Strength		
	Ultimate elongation	35%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	

Name	Parameter	Data	Conditions
COOPER PLA (Copper +PLA)	Density	1.5g/cm ³	23°C
	Melting Index	-	-
	Melting Point	160°C	
	Decomposition Temperature	190~240°C	
	Recommended Printing Temperature	210±10°C	
	Thermal Distortion Temperature	70°C	
	Tension speed	6mm/min	
	Impact Strength	-	
	Ultimate elongation	145%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	
	Character	*Metal appearance *Can be polished *Easy remove supporting parts *Can build big parts without tilt issue	

Name	Parameter	Data	Conditions
Copper Flex (Copper +TPE)	Density	0.96	
	Melting Index	-	-
	Melting Point	165°C	
	Decomposition Temperature	190~240°C	
	Recommended Printing Temperature	215±10°C	
	Thermal Distortion Temperature		
	Tension speed	6mm/min	
	Impact Strength	-	



Document Revision 2.0
Release Date : Jan, 2015

	Ultimate elongation	600%	
	Diameter Tolerance	1.75±0.03/3.0±0.05	
	Character	*Metal appearance *Flexible *Can build big parts without tilt issue Other notification *With heating bed would be better *Remove supporting parts will be easy when dip into hot water	