



Reprappertech Plastic Tech

3D Printing Filament Datasheet

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| 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 | |



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| 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 |



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|--|----------------------------------|--------------------|---|
| | 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 | |



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| | 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 | |



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| | 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 | - | |



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| | 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 | |