



Ultrafuse® rPET

Sustainability Meets High Performance

No less than 44 % of total waste* is generated by plastics. The 3D printing community provides a powerful opportunity to make current manufacturing methods more sustainable, so we have challenged ourselves to create a filament made from recycled material that is a serious alternative to filaments made from virgin raw materials.

We are now proud to say that with the new Ultrafuse® rPET we have more than met the challenge. The “r” stands for recycled, as Ultrafuse® rPET is made from recycled PET medical equipment. Components printed with Ultrafuse® rPET print, look and perform as outstandingly as our PET filament made from virgin raw material.

Benefits at a Glance

- Sustainable alternative to PET
- Easy to print
- Great end results

Example Applications

- Jigs & fixtures
- Automotive parts
- Prototyping

Material Properties

| | |
|---|--------------------------------|
| Tensile Strength (MPa) | 14.7 (ZX), 38.6 (XY) |
| Flexural Modulus (MPa) | 829(ZX), 1551 (XZ), 1662 (XY) |
| Elongation at Break | 1.2% (ZX), 4.3 % (XY) |
| Impact Strength Izod notched (kJ/m ²) | 1.5 (ZX), 3.3 (XZ), 4.4 (XY) |
| Impact Strength Izod unnotched (kJ/m ²) | 4.4 (ZX), 21.9 (XZ), 48.2 (XY) |
| HDT @ 0.45 MPa | 71°C |

Printing Guidelines

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|--------------------|--|
| Nozzle Temperature | 225-245 °C |
| Bed Temperature | 65-85 °C |
| Nozzle Diameter | ≥0.4 mm |
| Bed Modification | Adhesive spray or glue |
| Print Speed | 30-60 mm / s |
| Drying | Vacuum dryer or hot air dryer 60 °C for 4-16 hours |

The product data is provided in good faith and represents typical properties based on our current knowledge and experience; these data are not to be construed as specification limits or minimum values. Product properties may be changed without notice. This document does not create any liability, warranty or guarantee of product performance. It is the buyer's responsibility to determine the suitability of Ultrafuse® products for the intended application.

*Source: http://datatopics.worldbank.org/what-a-waste/trends_in_solid_waste_management.html



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