# 3D Printing Filament, EcoFilament

### **rPETG**

Manufactured from 100% recycled PETG. The material consists of three different components terephthalic acid, ethylene glycol and cyclohexane dimethanol. Compared to PET, PETG can provide an easier printing process, more transparent and less brittleness. Further, PETG is considered as a middle choice between the two most used filaments PLA and ABS since the polymer can be easily printed in comparison to ABS, and it is more durable than PLA.

# rPETG Mechanical & Thermal Properties

	Standard	Flat XY	Upright ZX
Tensile Strength	ISO 527	45.2 MPa	21.3 MPa
Elongtion at Break	ISO 527	3.98%	1.68%
Young's Modulus	ISO 527	1833 MPa	1465 MPa

Glass Transition Temperature 76.9°C

## **Recommended 3D Print Processing**

Nozzle Temperature: 230-240°C

Bed Material: Glass, BuildTak or PEI Sheets

Bed Temperature: 70 - 80°C Nozzle Diameter: > 0.4mm

Print Speed: 50 – 80 mm/s

## **General Properties**

Filament Diameter:  $1.75 \pm 0.05 \text{ mm}$ 

Filament Colour: Clear

Filament Weight: 1 kg, 3kg + 0.05

Filament Length: kg 320 ± 5 m