

Product Description

SMaRT PETG is manufactured by the SMaRT Centre 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.

Mechanical and Thermal Properties

	Standard	Flat XY	Upright ZX
Tensile Strength	ISO 527	45.2 MPa	21.3 MPa
Elongation 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 ± 0.05 mm
Filament colour	Clear
Filament weight	1 ± 0.05 kg
Filament length	320 ± 5 m