

Polyethylene terephthalate Glycol-Modified (PETG) 3D Printer Filament

General:

PETG is a commonly used filament for Fused deposition Modelling (FDM). The material is more flexible, heat and resistant than PLA making it more suitable for functional parts. Some suppliers use the terms PET and PETG interchangeably. PETG is 'glycol modified' PET which makes the material easier to print and less brittle, however PETG is significantly more difficult to recycle than PET.

Benefits:

- Does not warp or produce fumes when printing
- Smooth Surface finish
- Water resistant

Limitations

- Relatively soft compared to PLA
- Less sustainable than PLA
- Difficult to recycle

ASMPT Applications:

- 3D printed tooling and jigs

Colours:

- Colours can be specified in part drawings. For example, **DSM 3.3.3_Black**

These values are representative and vary considerably between suppliers and print settings. For critical applications, refer to datasheet.

Mechanical Properties (FDM Test Specimen)					
	HARDNESS SHORE D	TENSILE STRENGTH	YOUNGS MODULUS:	IMPACT STRENGTH:	DENSITY
PETG	76	40-50 MPA (XY) 20-30 MPa (Z)	1.5-2 GPa	5-8 kJ/m ²	1270 kg/m ³

Alternatives:

Alternative polymers are allowed only with the express written permission of ASMPT. Please email details of your request to engineering_enquiries@asmpt.com

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