Material Datasheet

PETG

PETG is a very tough material with good thermal resistance. It is a universal material, but it's especially suitable for mechanical parts and both indoor and outdoor use.

The G in the acronym PETG stands for Glycol which is added during the manufacturing process. Glycol modifies the properties of PET, so that it’s easier to print, less brittle and clearerwhen printing with semi-transparent variants. PETG has low thermal expansion. In addition to that, PETG is ductile. It has a healthy amount of flex which can prevent parts from breaking under pressure.

Common Applications

- Snap fit components
- Electronic Enclosure

Physical Properties	Standard	Unit	Typical Value
Density	ASTM D792	g/cm^3	1.23
Melt Flow Index	ASTM D1238	g/10 min	20(250°C/2.16Kg)

Mechanical Properties	Standard	Unit	Typical Value
Tensile Strength	ASTM D882	MPa	49
Elongation at Break	ASTM D882	%	228
Flexural Strength	ASTM D790	MPa	68
Flexural Modulus	ASTM D790	MPa	2027
Izod Impact Strength	ASTM D256	KJ/m^2	8

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	ASTM D3418	°C	80