



## ■ Material Overview

PETG is a thermoplastic material, short for Polyethylene Terephthalate Glycol-modified. It is an amorphous copolyester and part of the transparent plastics family. PETG is produced by copolymerizing three different monomers.

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## Advantages

- Superior Transparency:**  
PETG offers excellent clarity, making it ideal for applications that require a clear, visible finish.
- Impact Resistance:**  
The material has high durability and resistance to impact, making it suitable for high-stress applications.
- Excellent Processability:**  
PETG is easy to process, with good flow and minimal warping during production.
- Customizable Performance:**  
Its properties can be adjusted by modifying viscosity or adding third monomers like NPG and CHDM for enhanced performance.

## Applications

-  Electronics
-  Cosmetics
-  Signs
-  Displays
-  Thermoforming
-  Medical Devices
-  Packaging Materials.

## PETG polyester chips quality index TDS

Item		Units	RH-1500C	Remark
Intrinsic Viscosity		dL/g	0.73±0.015	Indicates the size of polymer molecules and its corresponding mechanical performance. The Viscosity is higher, the mechanical performance is better.
Melting Temp		°C	191±2	The product is non-crystalline and has no defined melting point. The melting point is measured by a microscope to obtain the melting temperature.
Carboxyl Group		mol/ton	≤35	High terminal carboxyl content will reduce the thermal stability of the product.
Color Value	b-value	/	1±2	b:Yellow color index; higher values indicate more yellow.
	L-value	/	≥60	L: Lightness value.
Di-ethylene Glycol		%	≤1	Side reactions with Etherification may degrade material durability and thermal properties.
Moisture content		%	≤0.4	Processing can cause polymer degradation due to moisture.
Ash Content		%	≤0.08	Ash is used to characterize the content of impurities in polyester, which comes from metal oxides decomposed by catalysts, raw materials and mechanical impurities generated during the production process.
Density		g/cm³	1.27	
Melt Flow Index		g/10min	10±2	Melt flow rate at 210°C with a 2.16kg weight.

- Note:**
- The intrinsic viscosity is a phenol/tetrachloroethane mixed solvent of 3:2, tested at 25°C
  - This polyester is an amorphous polyester material, and there is no melting peak in the DSC test; therefore, the melting point is tested by microscopy, and the mid-melting temperature is taken.
  - This polyester can be widely used in 3D printing consumables, polyester plates, sheets, polyester injection molding, home appliances and other fields.