

## Overview of materials for Polyethylene Terephthalate (PET), Recycled, Glass Reinforced

Category : Polymer , Thermoplastic , Polyester, TP , Polyethylene Terephthalate (PET) , Polyethylene Terephthalate (PET), Recycled, Glass Reinforced

### Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Polyethylene Terephthalate (PET), Recycled, Glass Reinforced". Each property range of values reported is minimum and maximum values of appropriate MatWeb entries. The comments report the average value, and number of data points used to calculate the average. The values are not necessarily typical of any specific grade, especially less common values and those that can be most affected by additives or processing methods.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Overview-of-materials-for-Polyethylene-Terephthalate-PET-Recycled-Glass-Reinforced.php](http://www.lookpolymers.com/polymer_Overview-of-materials-for-Polyethylene-Terephthalate-PET-Recycled-Glass-Reinforced.php)

Physical Properties	Metric	English	Comments
Density	1.43 - 1.80 g/cc	0.0517 - 0.0650 lb/in <sup>3</sup>	Average value: 1.71 g/cc Grade Count:7
Water Absorption	0.0200 - 0.100 %	0.0200 - 0.100 %	Average value: 0.0557 % Grade Count:7
Linear Mold Shrinkage	0.000600 - 0.00250 cm/cm	0.000600 - 0.00250 in/in	Average value: 0.00138 cm/cm Grade Count:5

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	106 - 133 MPa	15400 - 19300 psi	Average value: 116 MPa Grade Count:7
Elongation at Break	1.18 - 3.00 %	1.18 - 3.00 %	Average value: 1.68 % Grade Count:7
Modulus of Elasticity	9.29 - 13.2 GPa	1350 - 1910 ksi	Average value: 11.3 GPa Grade Count:6
Flexural Yield Strength	165 - 200 MPa	23900 - 29000 psi	Average value: 178 MPa Grade Count:7
Flexural Modulus	5.20 - 10.7 GPa	754 - 1550 ksi	Average value: 9.47 GPa Grade Count:7
Compressive Yield Strength	144 - 169 MPa	20800 - 24500 psi	Average value: 160 MPa Grade Count:6
Izod Impact, Notched	0.490 - 0.740 J/cm	0.918 - 1.39 ft-lb/in	Average value: 0.644 J/cm Grade Count:7

Thermal Properties	Metric	English	Comments
CTE, linear	15.12 - 15.12 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	8.400 - 8.400 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	Average value: 15.1 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ Grade Count:1
	@Temperature 100 - 100 $^\circ\text{C}$	@Temperature 212 - 212 $^\circ\text{F}$	
	46.8 - 46.8 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	26.0 - 26.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	

CTE, linear, Transverse to Flow Thermal Properties	Metric @ Temperature 100 - 100 °C	English @ Temperature 212 - 212 °F	Average value: 46.8 µm/m-°C Grade Count:7
Deflection Temperature at 1.8 MPa (264 psi)	203 - 221 °C	397 - 430 °F	Average value: 216 °C Grade Count:7
Flammability, UL94	HB - V-0	HB - V-0	Grade Count:7

Electrical Properties	Metric	English	Comments
Electrical Resistivity	7.95e+15 - 2.50e+16 ohm-cm	7.95e+15 - 2.50e+16 ohm-cm	Average value: 1.44e+16 ohm-cm Grade Count:6
Dielectric Constant	3.10 - 3.80	3.10 - 3.80	Average value: 3.53 Grade Count:7
Dielectric Strength	14.0 - 21.0 kV/mm	356 - 533 kV/in	Average value: 16.5 kV/mm Grade Count:7
Dissipation Factor	0.0100 - 0.0460	0.0100 - 0.0460	Average value: 0.0170 Grade Count:7
Arc Resistance	20.0 - 119 sec	20.0 - 119 sec	Average value: 48.4 sec Grade Count:7
Comparative Tracking Index	200 - 225 V	200 - 225 V	Average value: 217 V Grade Count:6

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China