

PET stands for Polyethylene Terephthalate. It is a thermoplastic polymer that is widely used in various industries due to its excellent combination of properties. PET is known for its high strength, dimensional stability, and chemical resistance. It has good barrier properties against moisture, gas, and aromas, making it suitable for packaging applications such as bottles, containers, and films.

Chemical Description

Description	Value
Material Type	Semi-Crystalline Thermoplastic
Chemical Name	PET Polyethylene Terephthalate
Additives	Unfilled
Color	Transparent
UV Resistant	No

Physical Properties

Property	Maximum Unless Range is Specified
Density,g/cm3	1.38
Coefficient of Linear Thermal Expansion, x10-5 in./in./°F	3.9
Heat Distortion Temp,°F at 263psi	175
Melting Point Temp,°F	490
Service Temp,Long Term,°F	230
Service Temp, Intermittent,°F	320
Dielectric Strength,V/mil	400
Thermal Conductivity,BTU-in/ft ² -hr-°F	2.01

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Strength at yield,ksi	10
Elasticity Modulus,ksi	485
Compressive Strength,ksi	14
Compressive Modulus,ksi	360
Flexural Strength,ksi	16
Flexural Modulus,ksi	470
Elongation at Break	50%
Hardness Shore D	85
Notched Izod Impact Strength,ft-lb/in	0.53

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.