

PC stands for Polycarbonate, is known for its high impact resistance, excellent optical clarity, and heat resistance. Polycarbonate offers good dimensional stability and electrical insulation properties. It is commonly used in a wide range of applications, including automotive parts, electrical enclosures, consumer electronics, and safety equipment due to its strength and transparency.

Chemical Description

Description	Value
Material Type	Amorphous Thermoplastic
Chemical Name	PC Polycarbonate
Additives	Unfilled
Color	Transparent Clear
UV Resistant	No

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in ³	0.043
Water Absorption, 24 hrs, Immersion,% by wt.	0.15
Coefficient of Linear Thermal Expansion, x10 ⁻⁵ in./in./°F	3.75
Thermal Conductivity, BTU-in/ft ² -hr-°F	1.35
Heat Deflection Temp,°F at 263psi	270
Melting Point Temp,°F	500
Max Continuous Operating Temp,°F	250
Minimum Operating Temp,°F	-22
Flammability Rating,UL94	HB
Dielectric Strength,V/mil	380
Dielectric Constant at 1 MHz	3.17

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Strength,ksi	9
Tensile Modulus,ksi	340
Compressive Strength,ksi	12.5
Compressive Modulus,ksi	345
Flexural Strength,ksi	13.5
Flexural Modulus,ksi	345
Elongation at Break	110%
Hardness, Rockwell R	118
Notched Izod Impact Strength,ft-lb/in	18

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.