

PBT

Details

This material has excellent resistance to abrasion and creep. It has a low coefficient of friction and a low moisture absorption. PBT is chemically resistant to strong and weak acids. It is used in gears, bushings and bearings.

Key Features

Resistant to abrasion and creep • Low moisture absorption

Thermal Properties

Property	Value
Heat deflection [°C]	160
Glasstransitiontemperature [°C]	22
Vicat softening temperature [°C]	150
Coefficient of thermal expansion [K ⁻¹ · 10 ⁻⁶]	108
Thermal conductivity [W/m · K]	0.27
Specific heat capacity [J/kg · K]	1421
Melting point [°C]	223

Mechanical Properties

Property	Value
Tensile strength [MPa]	82.7
Modulus of elasticity [GPa]	4
Flexural strength [MPa]	80
Flexural modulus [GPa]	3.83
Hardness	170
Impact strength [KJ/m ²]	4
Elongation at break [%]	130

Physical Properties

Property	Value
Density [g/cm ³]	1.52
Water Absorption [%]	0.1
Electrical Resistivity [ohm-cm]	14×10 ¹⁵