Injection Molding

PBT (Polybutylene Terephthalate)

Key Features

Stiffness • Heat resistance > 100°C • Chemical resistance • Smooth surface

Applications

End-end parts • Automotive • Electronics • Medicine • Consumer goods

Product Description

Polybutylene terephthalate (PBT) resin is known for its high mechanical strength, excellent dimensional stability, and high heat resistance. This material is widely used in the automotive industry for connectors and sensor housings, electrical and electronics for switches and circuit breakers, consumer goods like small appliance housings, industrial applications such as gears and bearings, and healthcare for medical device components.

Properties*

Tensile modulus	2,600 MPa
Tensile stress at 50% strain	33 MPa
Tensile strain at yield (50mm/min)	6%
Flexural strength	80 MPa
Flexural modulus	2,500 MPa
Melting temperature (10°C/min)	225°C
Heat deflection temperature (0.45 MPa)	150°C
Heat deflection temperature (1.80 MPa)	50°C
Vicat softening temperature (50°C/h 50N)	185°C
Density	1.31 g/cm^3
Hardness	79D

*Based on material CELANEX® 2001

Reference

For more detailed source information, please consult the original document linked here. We encourage users to verify the data's relevance and suitability for their specific needs.