

Data Sheet: TPE (Elastomer)

Details

This material exhibits excellent resistance to flexural fatigue. It has high impact strength, excellent chemical resistance, good resistance to tear and abrasion. In addition, it possesses good electrical properties. It is used in grips and handles, seals, plugs, power and hand tool components, wires and cables.

Key Features

Strong • Tear and abrasion resistant

Thermal Properties

Property	Value
Heat deflection [°C]	
Glass transition temperature [°C]	
Vicat softening temperature [°C]	
Coefficient of thermal expansion [K-1 · 10-6]	
Thermal conductivity [W/m · K]	0.2
Specific heat capacity [J/kg · K]	1700
Melting point [°C]	

Mechanical Properties

Property	Value
Tensile strength [MPa]	45
Modulus of elasticity [GPa]	
Flexural strength [MPa]	

Flexural modulus [GPa]	1.2
Hardness	
Impact strength [KJ/m ²]	30
Elongation at break [%]	200

Physical Properties

Property	Value
Density [g/cm ³]	1.1
Water Absorption [%]	
Electrical Resistivity [ohm-cm]	

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit [Materialdatacenter.com](https://www.materialdatacenter.com) for further information on this material.