Xometry

Datasheet

POM

(Delrin, Acetal)

Details

This material is an easy resin for molding. It has a relatively high tensile strength as well as high resistance to wear, creep and warp. It is generally durable and tough with low moisture absorption. Furthermore, it is resistant to chemicals such as hydrocarbons and solvents. It is used for a wide range of industrial and mechanical parts such as pumps, valves, bearings, fittings etc.

Key Features

Durable • Strong • Resistant to wear, creep and warp

Thermal Properties

Property	Value
Heat deflection [°C]	110
Glass transition temperature [°C]	-35
Vicat softening temperature [°C]	160
Coefficient of thermal expansion [K-1 · 10-6]	110
Thermal conductivity [W/m · K]	0.31
Specific heat capacity [J/kg · K]	1500
Melting point [°C]	165

Mechanical Properties

Property	Value
Tensile strength [MPa]	67
Modulus of elasticity [GPa]	2.8

Xometry

Datasheet

Flexural strength [MPa]	72.9
Flexural modulus [GPa]	3.1
Hardness	150
Impact strength [KJ/m^2]	6
Elongation at break [%]	30

PhysicalProperties

Property	Value
Density [g/cm^3]	1.41
Water Absorption [%]	0.11
Electrical Resistivity [ohm-cm]	14×10^{15}