Xometry

Manufacturing On Demand

Data Sheet: ULTEM 9085

Details

This has a high strength – to – weight ratio, high impact strength with good heat resistance. It is highly flame retardant. It is used in the production of prototypes as well as tools such as jigs, fixtures, composite moulds etc. It is comparable to Nylon 6.68 (9800).

Key Features

High impact strength • Resistant to heat • Flame retardant

Thermal Properties

Property	Value
Heat deflection [°C]	153
Glass transition temperature [°C]	186
Vicat softening temperature [°C]	173
Coefficient of thermal expansion [K-1 · 10-6]	3.67

Mechanical Properties

Property	Value
Tensile strength [MPa]	71.6
Modulus of elasticity [GPa]	2.2
Flexural strength [MPa]	115.1
Flexural modulus [GPa]	2.5
IZOD Impact [J/m]	106
Elongation at break [%]	6

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Physical Properties

Property	Value
Density [g/cm³]	1.34
Water Absorption [%]	0.39
Electrical Resistivity [ohm-cm]	4.9×10^{15}

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.