



PVDF / Polyvinylidene fluoride

Alternative Designations

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Key Features

High strength • Chemical resistant • Self-lubricating

Description

PVDF / polyvinylidene fluoride is a fluorine-based plastic. It is made up of repeating units of vinylidene difluoride. It has high tensile strength and can be drawn into thin fibers. It has good chemical resistance and self-lubricating properties. This material is used in a variety of applications, including electrical insulation, automotive parts, and medical devices.

Mechanical Properties

Tensile modulus	2000 MPa
Tensile strength	55 MPa
Elongation at break	20%
Flexural modulus	0.89 GPa
Hardness (Shore D)	77

Thermal Properties

Melting temperature (20°C/min)	169°C
Heat deflection temperature (1.80 MPa)	114 – 118°C
Softening temperature	170°C

Physical Properties

Density	1.78 g/cm ³
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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.