Carbon DLS™

FPU 50

Key Features

Abrasion resistance • Impact resistance • Fatigue resistance • Flexibility

Applications

Prototyping • End-use parts • Automotive • Consumer goods

Product Description

FPU 50 (Flexible Polyurethane) is a semi-rigid material renowned for its impact, abrasion, and fatigue resistance, ideal for parts enduring repetitive stresses like living hinges or friction fits. Mechanically akin to polypropylene, Carbon's FPU 50 stands out for its exceptional flexibility, boasting the highest elongation among 3D printing thermoset resins at 200%.

Properties

Tensile modulus	700 MPa
Tensile strength	25 MPa
Elongation at break	200%
Flexural stress (at 5% strain)	30 MPa
Flexural modulus	800 MPa
Heat deflection temperature (0.45 MPa)	70°C
Heat deflection temperature (1.80 MPa)	45°C
Thermal conductivity (ASTM C518)	0.14 W/m-K
Coefficient of Thermal Expansion (-40, 40 °C)	130 ppm/°C
Density	1.05 g/cm^3
Hardness	71D

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.