Carbon DLS™

EPX 82 (Epoxy)

Key Features

Strength • Chemical resistance • Thermal resistance

Applications

Prototyping • End-use parts • Jigs and fixtures • Automotive • Electronics • Consumer goods

Product Description

EPX 82 is an epoxy-based engineering material known for its exceptional durability and mechanical strength, comparable to lightly glass-filled thermoplastics like 20% GF-PBT and 15% GF-Nylon. It exhibits a heat deflection temperature ranging from 104°C to 130°C (depending on conditioning) and provides the requisite toughness for various automotive and industrial applications, including connectors, brackets, and housings.

Properties

Tensile modulus	2,8000 MPa
Tensile strength	80 MPa
Elongation at break	5%
Flexural stress (at 5% strain)	130 MPa
Flexural modulus	3,000 MPa
Heat deflection temperature (0.45 MPa)	130°C
Heat deflection temperature (1.80 MPa)	120°C
Thermal conductivity (ASTM C518)	0.2 W/m-k
Coefficient of thermal expansion (-60, 100 °C)	90 ppm/°C
Density	1.16 g/cm^3
Hardness	88D
Flame retardancy	UL 94 HB

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.