Stereolithography (SLA)

HighTemp DL400

Key Features

Heat resistance > 200°C • Stiffness • Impact resistance • Fatigue resistance • Able to print with a layer thickness of 350 µm

Applications

End-use parts • Tooling • Automotive • Engineering • Consumer goods

Product Description

HighTemp DL400 is a high temperature resistant resin, excelling in strength, stiffness, and heat resistance with a heat deflection temperature of 230°C. Ideal for extreme thermal environments, it handles impact, compression, fatigue, and moisture without deforming and supports a 350µm print layer thickness. Optimized for hot fluid and gas manifolds, molds, heat-resistant housings, and outdoor applications, it offers minimal shrinkage, a smooth surface finish, and fine detail printing.

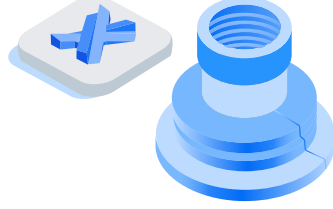
Properties*

Tensile modulus	4,000 MPa
Tensile strength	80 MPa
Elongation at break	4%
Flexural strength	109 MPa
Flexural modulus	3,300 MPa
Impact strength notched Izod	15.6 J/m
Heat deflection temperature (0.45 MPa)	230°C
Water absorption (short term)	0.35%
Density	1.1 g/cm^3
Hardness	95 D

*Post-cured state

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.



Stereolithography (SLA)

Ultracur3D RG1100

Key Features

Heat resistance > 100°C • Stiffness • UV resistance • Chemical resistance • Flame retardancy

Applications

End-use parts • Automotive • Engineering • Consumer goods

Product Description

Ultracur3D® RG 1100 is a high-strength polyurethane-based engineering grade resin boasting mechanical properties comparable to widely used injection molding grades. With a high heat deflection temperature (HDT 116°C), excellent chemical resistance, and long-term UV stability, it is well-suited for automotive connectors, engineering parts, exterior covers, brackets, and housings, ensuring durability and reliability in various environments.

Properties

E modulus	3,080 MPa
Tensile strength	70 MPa
Elongation at break	5%
Flexural strength	119 MPa
Flexural modulus	2,880 MPa
Notched Izod (machined), 23 °C	16 J/m
Heat deflection temperature (0.45 MPa)	116°C
Heat deflection temperature (1.80 MPa)	85°C
Water absorption, short term (24 hours)	0.32 %
Density	1.2 g/cm^3
Hardness	85D
Flame retardancy	UL 94-HB (1.5 mm)

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.