Technical Data

HighTemp DL400

Photocentric

Full size motorcycle fuel tank

Properties

Temperature resistance

Low | High

Tensile Modulus

Low | High

Compatible

Daylight 3D Printers

Liquid Crystal
MAGNA

Colours

● Amber

Available in 5kg bottles

Introduction

Photocentric HighTemp DL400 is the first Photocentric temperature resistant resin possessing superior properties of both strength and stiffness. It can handle impact, compression, fatigue, high temperatures and moisture without bending or deforming. Photocentric's HighTemp DL400 can be used for quick printing applications with an impressive layer thickness of 350 μm.

Best Used for:

- Hot fluid and gas manifolds
- Moulds and inserts
- Heat resistant housings and fixtures
- Outdoor applications

USPs

- Temperature resistant (Heat Deflection Temperature of 230 °C)
- Excellent long-lasting performance under heat and stress
- Quick and fast prototyping 350 μm layer
- Simulating the strength and stiffness of glass filled Nylon 6
- Smooth surface finish and ability to print fine details
- Minimal shrinkage

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Processing Instructions

- Working Temperature should be above 23 °C. Below this temperature the resin may crystalize.

Post Processing

- Draining and cleaning the vat is recommended after print completion as the ambient temperature may drop below 23 °C when the printer is not in use.
- Keep parts on the platform. Wash in the Photocentric Resin Cleaner until the parts are clean and for no longer than 15 minutes. 1 minute warm water rinse and then air dry the parts. Post cure them for 1hr at 60°C in CureL2.

Properties

Tensile Properties		
Tensile Modulus *	3800-4000 MPa	ASTM D638
Ultimate Tensile Strength *	80 MPa	ASTM D638
Elongation at break *	4%	ASTM D638
Flexural Properties		
Flexural Strength *	109 MPa	ASTM D790
Flexural Modulus *	3300 MPa	ASTM D790
Impact Properties		
Impact Strength Notched Izod *	3.1 kJ/m2	ISO 180
General Properties		
Hardness *	95 Shore D	ASTM D2240
Heat Deflection Temperature *	230 °C	ASTM D648 (0.455 MPa)
Viscosity	650 cPs	At 25°C Brookfield spindle 3
Density	1.10 g/cm3	
Storage	10<T>50°C	

* Post cured for 1hr at 60°C in CureL2