

Material Information



High-temp Resistant Resin Red

Introduction

High-temp Resistant Resin Red is a specialized resin material developed to suit use cases that require better temperature resistance performance. This material can be translucent or transparent with a red-orange tint in color.

Advantages

High temperature resistance compared to other resin materials. Tough. Gives smooth surface. Can be made transparent or translucent.

Disadvantages

Air bubbles maybe occasionally show up inside of the print when printing a complex, solid, and thick product.

Tolerance

±200µm or 0.2%

Recommendation

High-temp Resistant Resin Red is ideal to produce parts that needs to work under high temperature but needs lights to come through and do not compromise on the surface smoothness, such as lampshades or light pipelines.

Material Specifications		
Heat deformation (0.46 MPa)	ASTM D648M	101.9 °C
Heat deformation (1.82 MPa)	ASTM D648M	85.5 °C
Tensile strength	ASTM D638M	42.7 MPa
Tensile modulus	ASTM D638M	3235 MPa
Elongation at Break	ASTM D638M	1.5%
Flexural Strength	ASTM D790M	96.6 MPa
Flexural modulus	ASTM D2240	3165 MPa
Hardness	ASTM D2240	83, Shore D

Attention

Products printed with resin material will gradually turn yellow and brittle after long-term exposure to direct sunlight because of the nature of this material. If you want to prevent this, you may need to keep it away from direct sunlight or add 3D Plus services such as painting to block sunlight.

Applications

3DSPRO find people using High-temp Resistant Resin Red to make functional parts and prototypes in the following industries & applications.

Artwork and Decoration:

Sculptures, props, jewelries, miniatures, figurines, interior decorations, toys, dolls, etc.

Consumer electronics appliances:

Light pipelines, lampshades, laptops, tablets, mobile phones, digital cameras, game consoles, MP3, mobile power bank.

Electromechanical equipment:

Taillights, industrial display panels, lights on power tools, electrical instruments, experimental instruments, measuring tools, etc.

Home supplies:

Air conditioner, air purifier, vacuum cleaner, electric fan, ironing machine, water dispenser, juicer, hair dryer, etc.