

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 a smooth surface. It can be made transparent or translucent.

Disadvantages

Air bubbles may 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 for producing parts that need to work under high temperatures but need 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	42.7MPa
Tensile Modulus	ASTM D638M	3235MPa
Elongation at Break	ASTM D638M	1.5%
Flexural Strength	ASTM D790M	96.6MPa
Flexural Modulus	ASTM D2240	3165MPa
Hardness	ASTM D2240	83 Shore D

Attention

Due to the characteristics of resin materials, products printed with resin materials will gradually turn yellow and become brittle after long-term exposure to direct sunlight. If you want to avoid this from happening, you may need to move it out of direct sunlight or add 3D Plus™ services (such as spray painting) to block out the sunlight.

Applications

3DSPRO finds people using high-temp resistant resin red to make functional parts and prototypes in the following industries and applications.

Artwork and Decoration:

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

Consumer electronics appliances:

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

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.