

Tough Resin Green

Material Introduction



Introduction

Tough Resin Green is a new material of SLA 3D Printing service at Wenext. Parts printed by the material will be in light green with smooth surface, and the parts are suitable for product verifications, rugged prototyping, model display, etc. Choose Tough Resin Green for prototyping strong, rugged, and wear-resistant parts.

Advantages

Tough Resin Green delivers high hardness, good toughness, high strength and precision. Temperature resistance of printed part is excellent, making the part dimensionally stable and not easily deformed. Besides, printing with the material is efficient and productive because the printing speed is fast.

Tolerance

200 μ m or 0.2%

Attributes

Heat deformation (0.46 MPa) (ASTM D648-18 Method B): 56.4 $^{\circ}$ C

Dielectric strength (ASTM D149-20 Method A): 18.15 kV/mm

Flexural strength (ASTM D790-17 Procedure A): 83.1 MPa

Flexural modulus (ASTM D790-17 Procedure A): 2390 MPa

Izod notch impact strength (ASTM D256-10(2018) Method A): 42J/m

Hardness (Shore D) (ASTM D2240-15 ϵ 1): 83

Tensile modulus (ASTM D638-14): 3200 MPa

Tensile strength at yield (ASTM D638-14): 62.4 MPa

Elongation at break (ASTM D638-14): 6.8%

Liquid density (GB/T 13354-1992): 1.149g/cm³

Relative Permittivity (ASTM D150-18): 5.002

Dissipation Factor (ASTM D150-18): 0.0327

Viscosity (SAE J243-1971 Section 3.2.2): 390cP

Water absorption (ASTM D570-98(2018)): 0.54%

Applications

- Tough Resin Green can be used in various applications such as strong and stiff prototypes, product development, product verifications, industrial designs, customised parts and models, component testing, etc.