

SLA Materials

Stereolithography (SLA)

We can convert your CAD files into 3D objects, dimensionally accurate very fast, using the stereolithography method. NanoTool is a high strength, high temperature composite material with excellent detail. Colors, opaque off White and Tan when thermal postcured.

As a brittle material, NanoTool is excellent for parts specifically used in high heat applications. This material has a high heat deflection of 436 °F once UV & Thermal Postcured. High temperature resistant can be achieved up to (506 °F).

Process Stereolithography

Product:	NanoTool – Off White
Tensile Strength (ASM D638):	61.7 - 78 MPa 8,900 – 11,300 PSI
Tensile Modulus (ASM D638):	1.2 g/cm ²
Elongation @ Break % (ASTM D638):	.7 – 1%
Flexural Strength (ASTM D790):	79 - 121 MPa 11,500 – 17,500 PSI
Flexural Modulus (ASTM D790):	10,200 – 10,800 MPa 1,480 – 1,570 KSI
Impact Strength (notched Izod):	.12 - .15 J/cm .23 - .29 ft-lb/in
Heat Deflection Temperature (UV Postcured) (ASTM D648):	@ .46 MPa 225 °C @ 66 PSI 437 °F @ 1.81 MPa 85 - 90 °C @ 264 PSI 185 - 193 °F
Heat Deflection Temperature (UV & Thermal Postcured) (ASTM D648):	@ .46 MPa 258 - 263 °C @ 66 PSI 496 - 506 °F @ 1.81 MPa 104 °C @ 264 PSI 220 °F
Applications:	Lighting fixtures, under the hood, metal plating, and rapid tooling.

Disclaimer: All tolerance specifications reflect the approximate range of a process's capabilities and should be viewed only as a guide. Actual capabilities are dependent upon manufacturing, equipment, material, and part requirements.