

STEREOLITHOGRAPHY

CERAMIC-LIKE WHITE

(ADVANCED HIGH TEMP)



Product Description

Ceramic-Like White (Advanced High Temp) combines superior high heat tolerance with strength and stiffness. A thermal post-cure can be used to further improve mechanical properties and its heat resistance, however, it will be more brittle.

Applications

Advanced Ceramic-Like High-Temp White is often used for automotive housings, electrical casings, wind tunnel testing, and other components that require high heat tolerance and strength.



Key Product Benefits

- ▶ High strength and stiffness
- ▶ Superior heat tolerance

Tolerances

For well-designed parts, tolerances in the X/Y dimension of ± 0.002 in. (0.05mm) for the first inch plus ± 0.001 in./in., and Z-dimension tolerances of ± 0.005 in. (0.127mm) for the first inch plus ± 0.001 in./in. (0.001mm/mm), can typically be achieved. Note that tolerances may change depending on part geometry.

Properties

Property	Test Method	Value	After Optional Thermal Post-Curing
Color	-	White	White
Density in solid state*	@ 25 °C (77 °F)	1.61 g/cm ³	-
Water absorption (20 °C, 50% relative humidity)	ASTM D570	0.35 ± 0.15%	0.35 ± 0.15%
E-module (x-y plane)	ASTM D638, test speed 10mm/min	10,000 ± 1,000 MPa	10,500 ± 1,000 MPa
Tensile strength (x-y plane)	ASTM D638, test speed 10mm/min	70 ± 10 MPa	75 ± 10 MPa
Elongation at break (x-y plane)	ASTM D638, test speed 10mm/min	1.5 ± 1%	1 ± 0.5%
Heat deflection temperature @ 0.46 MPa*	ASTM D648	132 °C (270 °F)	268 °C (514 °F)
Heat deflection temperature @ 1.82 MPa*	ASTM D648	82 °C (180 °F)	119 °C (246 °F)

* From supplier data sheet