STEREOLITHOGRAPHY

CERAMIC-LIKE WHITE

(ADVANCED HIGH TEMP)

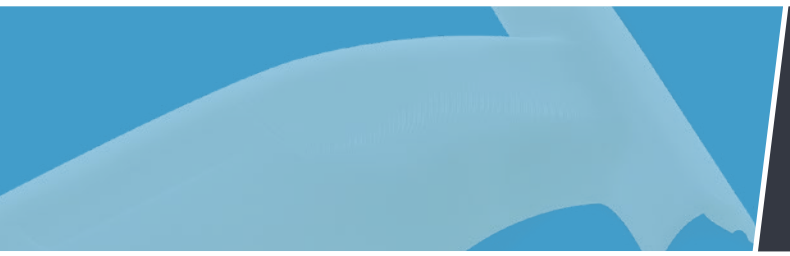
Supplier Data Sheet:
PerFORM
Watershed

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

PROPERTIES

PROPERTY	TEST METHOD	VALUE	AFTER OPTIONAL THERMAL POST-CURING
Colour	-	White	White
Density in solid state*	@ 25 °C (77 °F)	1.61 g/cm³	-
Water absorption (20 °C, 50% relative humidity)	DIN EN ISO 62	0.35 ± 0.15%	0.35 ± 0.15%
E-module (x-y plane)	DIN EN ISO 527, test speed 10mm/min	10,000 ± 1,000 MPa	10,500 ± 1,000 MPa
Tensile strength (x-y plane)		70 ± 10 MPa	75 ± 10 MPa
Elongation at break (x-y plane)		1.5 ± 1%	1 ± 0.5%
Heat deflection temperature @ 0,46 MPa*	DIN EN ISO 75	132 °C (270 °F)	268 °C (514 °F)
Heat deflection temperature @ 1,82 MPa*		82 °C (180 °F)	119 °C (246 °F)

*From supplier data sheet

TOLERANCES

For parts that are built in High Resolution (HR): The tolerances for well-designed parts are in the X / Y direction ± 0.05mm plus an additional ± 0.001mm / mm; In Z direction ± 0.13mm plus additional ± 0.001mm / mm. For parts that are built in Normal Resolution (NR): The tolerances for well-designed parts are in the X / Y direction ± 0.1mm plus an additional ± 0.001mm / mm; In Z direction ± 0.13mm plus additional ± 0.001mm / mm. Note that tolerances may change depending on part geometry.

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PROTOLABS

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