STEREOLITHOGRAPHY

(ADVANCED HIGH TEMP)

PC-LIKE TRANSLUCENT





PRE-THERMAL CURE

Product Description

PC-Like Translucent (Advanced High Temp) is best used for parts that need strength and stiffness combined with high temperature resistance. With a thermal post-cure, the part's heat deflection can be improved even further, but at the expense of durability.

Applications

Advanced PC-Like High-Temp Translucent works well for parts that require high temperature resistance such as under-the hood-automotive or electrical components.



Key Product Benefits

- ▶ High temperature resistance
- ▶ Higher resistance to heated fluids
- ▶ Translucent

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	-	Light Tan	Amber
Density in solid state*	@ 25 °C (77 °F)	1.21 g/cm³	-
Water absorption (20 °C, 50% relative humidity)	ASTM D570	0.55 ± 0.15%	0.55 ± 0.15%
E-module (x-y plane)	ASTM D638, test speed 10mm/min	3,400 ± 400 MPa	3,900 ± 400 MPa
Tensile strength (x-y plane)	ASTM D638, test speed 10mm/min	50 ± 10 MPa	45 ± 10 MPa
Elongation at break (x-y plane)	ASTM D638, test speed 10mm/min	3 ± 2%	1.5 ± 1%
Heat deflection temperature @ 0.46 MPa*	ASTM D648	70 – 85 °C (158 – 185 °F)	170 – 250 °C (338 – 482 °F)
Heat deflection temperature @ 1.82 MPa*	ASTM D648	55 – 58 °C (131 – 136 °F)	110 – 120 °C (230 – 248 °F)

^{*} From supplier data sheet

