



AFP3100FR

URETHANE CASTING MATERIAL SPECIFICATIONS

Highlights

- Extremely durable, high-impact urethane with UL 94 V-0 flammability at 0.1 inch (2.6 mm)
- Meets FAR 25.853a requirements per Appendix F, Part 1 (a1) (ii)
- Simulates ABS and PC/ABS
- Good heat resistance

Applications

- Ruggedized covers and skins for medical equipment, scientific instruments, consumer electronics, and electronic controllers.
- Products requiring a UL 94 V-0 flammability rating

TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	Light Amber	Light Amber
Compressive Modulus	ASTM D695	413,908 psi	2,854 MPa
Compressive Strength	ASTM D695	15,360 psi	103 MPa
Density	ASTM D792	0.0422 lb/in ³	1.17 gm/cc
Elongation at Break	ASTM D638	25%	25%
Flexural Modulus	ASTM D790	424,275 psi	2,925 MPa
Flexural Strength	ASTM D790	15,445 psi	106 MPa
Heat Deflection Temperature@ 66 psi	ASTM D648	179°F	82°C
Glass Transition Temperature E (onset)	ASTM D4065	176°F	80°C
Glass Transition Temperature Tg (peak)	ASTM D4065	211°F	99°C
Coefficient of Thermal Expansion	ASTM D696	6.00E-05 in/in/°F	-
Izod Impact Strength (method A, notched)	ASTM D256	1.60 ft-lb/in	85 J/m
Shore D Hardness	ASTM D2240	85 D	85 D
Tensile Modulus	ASTM D638	381,675 psi	2,632 MPa
Tensile Strength	ASTM D638	10,650 psi	73 MPa
Flammability per UL 94 V-0 Specification	UL 94 V-0	UL File No. E238713	-

The information presented represents typical values intended for reference and comparison purposes only. It should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, color etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

The performance characteristics of these materials may vary according to application, operating conditions, or end use. Each user is responsible for determining that the material is safe, lawful, and technically suitable for the intended application. Stratasys makes no warranties of any kind, express or implied, including, but not limited to, the warranties of merchantability, fitness for a particular use, or warranty against patent infringement.