



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	413,816 psi	2,854 MPa
Compressive Strength	ASTM D695	15,360 psi	103 MPa
Density	ASTM D792	0.0422 lb/in ³	1.17 g/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.

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