

QUANTUMCAST MATERIAL SPECIFICATIONS

AFP3100

Highlights

- Extremely durable, high-impact urethane
- Simulates ABS and PC/ABS
- Good heat resistance

Applications

- Ruggedized covers and skins for medical equipment, scientific instruments, consumer electronics, and electronic controllers

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	English	Metric
Color/Appearance	Visual	White	White
Compressive Modulus	ASTM D695	357,510 psi	2,465 MPa
Compressive Strength	ASTM D695	11,943 psi	82 MPa
Density	ASTM D792	0.0417 lb/in ³	1.15 gm/cc
Elongation at Break	ASTM D638	22%	22%
Flexural Modulus	ASTM D790	386,612 psi	2,666 MPa
Flexural Strength	ASTM D790	15,574 psi	107 MPa
Heat Deflection Temperature @ 264 psi	ASTM D648	164°F	73°C
Heat Deflection Temperature @ 66 psi	ASTM D648	190°F	88°C
Glass Transition Temperature E (onset)	ASTM D4065	193°F	89°C
Glass Transition Temperature Tg (peak)	ASTM D4065	213°F	101°C
Coefficient of Thermal Expansion	ASTM D696	6.09E-05 in/in/°F	-
Izod Impact Strength (method A, notched)	ASTM D256	2.10 ft-lb/in	112 J/m
Shore D Hardness	ASTM D2240	85 D	85 D
Tensile Modulus	ASTM D638	371,155 psi	2,559 MPa
Tensile Strength	ASTM D638	10,010 psi	69 MPa

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change with out notice.