

CAST URETHANE MATERIAL SPECIFICATIONS

AFP3300

Highlights

- Good impact and flexural resistance
- Temperature resistance above 248°F/120°C
- Heat Deflection of 265°F/129.4°C at 66psi

Applications

- Manufacture of prototypes and mock-ups which have to present properties close to those of thermoplastics (PP/ABS).

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	English	Metric
Color/Appearance	Visual	Black	Black
Density	ASTM D792	0.0405 - 0.0419 lb/in ³	1.12 - 1.16 gm/cc
Elongation at Break	ASTM D638	10.0 %	10.0 %
Flexural Modulus	ASTM D790	330,000 - 335,000 psi	2,275 - 2,300 MPa
Flexural Strength	ASTM D790	11,600 - 11,800 psi	80 - 82 MPa
Heat Deflection Temp. @ 66 psi	ASTM D648	248 - 265 °F	120 - 129 °C
Glass Transition Temp. E' (onset)	ASTM D4065	248 °F	120 °C
CHARPY impact strength	ISO 179/1D-94	343 ft-lb/in ²	60 KJ/m ²
Shore D Hardness	ASTM D2240	70 - 80 D	70 - 80 D
Tensile Strength	ASTM D638	8,400 - 8,600 psi	58 - 60 MPa

Custom formulations, fillers such as Teflon and Aluminum powder, and additional post curing techniques may be used to enhance urethane material properties. For further information on additives and custom formulations, please contact your Solid Concepts Project Engineer. The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and color pigmentation. Specifications are subject to change with out notice.