



# AFP3200

## URETHANE CASTING MATERIAL SPECIFICATIONS

### Highlights

- Provides a unique combination of physical properties for very tough and durable parts and assemblies; simulates HDPE
- Good rigidity and stiffness due to its very high modulus
- High tensile and impact strength for excellent resistance to breakage

### Applications

- Consumer products like household goods and toys
- Packaging such as caps, closures and cups
- Industrial usages like piping and tanks
- Automotive products such as wheel wells, hoods, bumpers, fenders

### TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	Black	Black
Compressive Modulus	ASTM D695	221,499 psi	1,527 MPa
Compressive Strength	ASTM D695	8,608 psi	59 MPa
Density	ASTM D792	.0407 lb/in <sup>3</sup>	1.12 g/cm <sup>3</sup>
Elongation at Break	ASTM D638	45%	45%
Flexural Modulus	ASTM D790	207,408 psi	1,430 MPa
Flexural Strength	ASTM D790	9,337 psi	64 MPa
Glass Transition Temperature E (onset)	ASTM D4065	171°F	77°C
Glass Transition Temperature Tg (peak)	ASTM D4065	232°F	111°C
Izod Impact Strength (method A, notched)	ASTM D256	3.17 ft-lb/in	169 J/m
Shore D Hardness	ASTM D2240	80 D	80 D
Tensile Modulus	ASTM D638	222,197 psi	1,531 MPa
Tensile Strength	ASTM D638	7,595 psi	52 MPa
Water Absorption	ASTM D570	11%	11%
Heat Deflection Temperature @ 66 psi	ASTM D648	230°F	110°C
Coefficient of Thermal Expansion	ASTM D696	7.2 e-05	130.4 e-06

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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