Rigur

POLYJET SIMULATED POLYPROPYLENE MATERIAL

Rigur™ (RGD450) is an advanced simulated polypropylene photopolymer with improved toughness, increased dimensional stability and great surface finish. Offered in a bright white color, Rigur is ideal for flexible closures and living hinges; reusable containers and packaging; and white appliances including consumer goods, household appliances, consumer electronics and automotive parts. Digital Materials that combine Rigur with other base resins offer a range of gray color and Shore A options, expanding the applications for Rigur.

MECHANICAL PROPERTIES	TEST METHOD	IMPERIAL	METRIC
Tensile Strength	D-638-03	5,800-6,500 psi	40-45 MPa
Elongation at Break	D-638-05	20-35%	20-35%
Modulus of Elasticity	D-638-04	246,000-305,000 psi	1,700-2,100 MPa
Flexual Strength	D-790-03	7,500-8,500 psi	52-59 MPa
Flexual Modulus	D-790-04	217,000-246,000 psi	1,500-1,700 MPa
Izod Notched Impact	D-256-06	0.561-0.656 ft lb/inch	30-35 J/m

THERMAL PROPERTIES	TEST METHOD	IMPERIAL	METRIC
Heat Deflection (HDT) @ 0.45 MPa	D-648-06	120-129 °F	49-54 °C
Heat Deflection (HDT) @ 1.82 MPa	D-648-07	113-122 °F	45-50 °C
Glass Transition (Tg)	DMA, E	118-126 °F	48-52 °C

OTHER	TEST METHOD	IMPERIAL	METRIC
Shore Hardness	Scale D	80-84 Scale D	80-84 Scale D
Rockwell Hardness	Scale M	58-62 Scale M	58-62 Scale M
Polymerized Density	ASTM D792	—	1.20-1.21 g/cm^3
Ash Content	USP 281	0.3-0.4%	0.3-0.4%

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