

Durus | POLYJET SIMULATED POLYPROPYLENE MATERIAL

Durus™ (RGD430) is a simulated polypropylene material that exhibits great impact resilience and an impressive elongation at break of 44 percent. The milky white material is extremely high detail with print layers of 30 microns or 16 microns. Durus is rigid and flexible, perfect for snap-fit components, living hinges and other demanding applications.

MECHANICAL PROPERTIES	TEST METHOD	IMPERIAL	METRIC
Tensile Strength	D-638-03	2,900 - 4,350 psi	20 - 30 MPa
Elongation at Break	D-638-05	40 - 50%	40 - 50%
Modulus of Elasticity	D-638-04	145,000 - 175,000 psi	1,000 - 1,200 MPa
Flexual Strength	D-790-03	4,350 - 5,800 psi	30 - 40 MPa
Flexual Modulus	D-790-04	175,000 - 230,000 psi	1,200 - 1,600 MPa
Izod Notched Impact	D-256-06	0.749 - 0.937 ft lb/inch	40 - 50 J/m

THERMAL PROPERTIES	TEST METHOD	IMPERIAL	METRIC
Heat Deflection (HDT) @ 0.45 MPa	D-648-06	99 - 108 °F	37 - 42 °C
Heat Deflection (HDT) @ 1.82 MPa	D-648-07	90 - 93°F	32 - 34 °C
Glass Transition (Tg)	DMA, E	95 - 99 °F	35 - 37 °C

OTHER	TEST METHOD	IMPERIAL	METRIC
Shore Hardness	Scale D	74 - 78 Scale D	74 - 78 Scale D
Rockwell Hardness	Scale M	-	-
Polymerized Density	ASTM D792	-	1.15 - 1.17 g/cm ³
Ash Content	USP 281	0.10 - 0.12%	0.10 - 0.12%

