

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

Thermal Properties	Test Method	Value
Heat Deflection (HDT) @ 0.45 MPa	D-648-06	49 – 54 °C (120 – 129 °F)
Heat Deflection (HDT) @ 1.82 MPa	D-648-07	45 – 50 °C (113 – 122 °F)
Glass Transition (Tg)	DMA, E	48 – 52 °C (118 – 126 °F)

Other	Test Method	Value
Shore Hardness	Scale D	80-84 Scale D
Rockwell Hardness	Scale M	58-62 Scale M
Polymerized Density	ASTM D792	1.20-1.21 g/cm <sup>3</sup>
Ash Content	USP 281	0.3 – 0.4%



## Rigur

System Availability	Layer Thickness Capability	Support Structure	Available Color
Objet30 Pro™, Objet30 Prime™	28 microns (0.0011 in)	SUP705 (WaterJet removable)	□ White
		SUP706B (soluble)	
Objet Eden260VS™	16 microns	SUP705 (WaterJet removable)	□ White
	(.0006 in)	SUP706B (soluble)	
Objet Eden260V <sup>TM</sup> / 350V <sup>TM</sup> /500V <sup>TM</sup>	High Quality mode: 16 microns (0.0006 in.)	SUP705 (WaterJet removable)	□ \\\/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	High Speed mode: 30 microns (0.0012 in.)	SUP706B (soluble)	☐ White
Objet260/350/500 Connex3™	High Quality mode: 16 microns (0.0006 in.)	SUP705 (WaterJet removable)	□ \//bito
	High Speed mode: 30 microns (0.0012 in.)	SUP706B (soluble)	☐ White
	Digital Material: 34 microns (0.0013 in.)		
Objet1000 Plus™	High Speed mode: 34 microns (0.0013 in.)	SUP705 (WaterJet removable)	☐ White
	High Quality mode: 16 microns (0.0006 in.)		

The data included in this spec sheet is for your information purposes only and should not be considered specific advice to any particular customer project. Each customer is responsible for the design, functioning and all other decisions with regards to its particular projects and systems. The sale and provision of the products described in this brochure are subject to terms and conditions outlined in Stratasys' selling policies, contracts between the parties or Stratasys' Terms and Conditions of Sale. This spec sheet is not intended to and does not enlarge or add to any such contract or terms.

#### **Stratasys Headquarters**

7665 Commerce Way, Eden Prairie, MN 55344 +1 800 801 6491 (US Toll Free)

+1 952 937-3000 (Intl)

+1 952 937-0070 (Fax)

1 Holtzman St., Science Park, PO Box 2496 Rehovot 76124, Israel +972 74 745 4000 +972 74 745 5000 (Fax)

### stratasys.com

ISO 9001:2015 Certified

