

# Accura<sup>®</sup> 25 plastic for use with solid-state stereolithography (SLA<sup>®</sup>) systems

#### Simulate the properties and aesthetics of polypropylene with this accurate and flexible material.



### **APPLICATIONS**

- Functional components for assemblies and mock-ups for:
  - Automotive styling parts trim, fascia, and other components
  - Consumer electronic components
  - Toys
  - Snap fit assemblies
- Master patterns for RTV/silicone molding
- Replace CNC machining of polypropylene to produce short-run plastic parts
- Simulate injection molded parts
- Concept and marketing models

#### **FEATURES**

- Look and feel of molded polypropylene
- High flexibility with excellent shape retention
- Outstanding feature resolution and accuracy
- High production speed
- Fully developed and tested build styles

#### **BENEFITS**

- Increased market opportunities for models
- Reliable and robust functional prototypes
- Suitable for master patterns
- More parts and better system utilization
- Easy to use with no user R&D

## Accura 25 plastic

For use with solid-state stereolithography (SLA) systems

"After providing some models in Accura 25 to a couple of our regular customers, they have decided to make it their default SL material for all future orders. To date they have already ordered hundreds of parts. They get a material that looks like a final article molded part having a great balance of durability and flexibility. I get a material that is very easy to clean and finish, but most importantly is extremely reliable in the machine. This has been a real win-win for us."

#### -- Steve Grundahl — Owner, Midwest Prototyping LLC

Liquid Material		
MEASUREMENT	CONDITION	VALUE:
Appearance		White
Liquid Density	@ 25 °C (77 °F)	1.14 g/cm <sup>3</sup>
Solid Density	@ 25 °C (77 °F)	1.19 g/cm <sup>3</sup>
Viscosity	@ 30 °C (86 °F)	250 cps
Penetration Depth (Dp) $^{*}$		4.2 mils
Critical Exposure (Ec) *		10.5 mJ/cm <sup>2</sup>
Tested Build Styles		FAST™, EXACT™, Exact HR
MEASUREMENT	CONDITION	VALUE:
MEASUREMENT	CONDITION	VALUE:
Tensile Strength	ASTM D 638	38 MPa (5,450 - 5,570 PSI)
Tensile Modulus	ASTM D 638	1,590 - 1,660 MPa (230 - 240 KSI)
Elongation at Break (%)	ASTM D 638	13 - 20 %
Flexural Strength	ASTM D 790	55 - 58 MPa (7,960 - 8,410 PSI)
Flexural Modulus	ASTM D 790	1,380 - 1,660 MPa (200 - 240 KSI)
	ASTM D 256	19-24 l/m (0.4 ft-lb/in)
Impact Strength (Notched Izod)	//S1111 D 250	19 24 5/11 (0.4 10 10/11)
Impact Strength (Notched Izod) Heat Deflection Temperature	ASTM D 648 @ 66 PSI @ 264 PSI	58 - 63 °C (136 - 145 °F) 51 - 55 °C (124 - 131 °F)
Impact Strength (Notched Izod) Heat Deflection Temperature Hardness, Shore D	ASTM D 648 @ 66 PSI @ 264 PSI	58 - 63 °C (136 - 145 °F) 51 - 55 °C (124 - 131 °F) 80
Impact Strength (Notched Izod) Heat Deflection Temperature Hardness, Shore D Co-efficient of Thermal Expansion	ASTM D 648 @ 66 PSI @ 264 PSI ASTM E 831-93 TMA (T <tg, -="" 0="" 20°c)<br="">TMA (T&gt;Tg, 90 - 150°C)</tg,>	58 - 63 °C (136 - 145 °F) 51 - 55 °C (124 - 131 °F) 80 107 x 10° m/m °C 151 x 10° m/m °C



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