

# 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, fascias, and other components
  - Consumer electronic components
  - Toys
  - Snap fit assemblies
- Master patterns for RTV/silicone moulding
- Replace CNC machining of polypropylene to produce short-run plastic parts
- Simulate injection moulded parts
- Concept and marketing models

## FEATURES

- Look and feel of moulded 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 utilisation
- 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 moulded 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

## TECHNICAL DATA

### 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

### Post-Cured Material

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)
Impact Strength (Notched Izod)	ASTM D 256	19-24 J/m (0.4 ft- lb/in)
Heat Deflection Temperature	ASTM D 648 @ 66 PSI @ 264 PSI	58 - 63 °C (136 - 145 °F) 51 - 55 °C (124 - 131 °F)
Hardness, Shore D		80
Co-efficient of Thermal Expansion	ASTM E 831-93 TMA (T<Tg, 0 - 20°C) TMA (T>Tg, 90 - 150°C)	107 x 10 <sup>-6</sup> m/m °C 151 x 10 <sup>-6</sup> m/m °C
Glass Transition (Tg)	DMA, E"	60 °C (140 °F)

\* Dp/Ec values are the same on all systems.



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