



# Accura<sup>®</sup> 60 plastic

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

**Simulate the properties and appearance of polycarbonate with this clear, tough plastic.**



*Dive mask faceplate design is patented and courtesy of Kirby Morgan Dive Systems and Scicon Technologies*

## APPLICATIONS

- Tough functional prototypes
- Automotive design components
- Consumer electronics (cell phones etc.)
- Medical instruments, devices and lab-ware
- Lighting components (lenses etc.)
- Fluid flow and visualisation models
- Master patterns for urethane castings
- QuickCast™ patterns for investment casting
- Transparent assemblies
- Clear display models
- Concept and marketing models

## FEATURES

- Durable and stiff
- High clarity
- Fast build speed
- Low viscosity formulation
- Humidity resistant parts
- Fully developed and tested build styles

## BENEFITS

- Achieve the look and feel of polycarbonate
- View internal features and passages
- Increase system throughput
- Minimise part cleaning and finishing
- Realise extended part life
- Maximise reliability with no user R&D

# Accura® 60 plastic

For use with solid-state stereolithography (SLA®) systems

"Accura 60 has exceeded our customer's expectations in every aspect. It has great physical properties, including durability, and reliable and consistent shrinkage behaviour. Best of all, when we polished Accura 60 parts, they very closely resemble moulded polycarbonate."

— Scott Turner - President - Scicon Technologies



## TECHNICAL DATA

### Liquid Material

MEASUREMENT	CONDITION	VALUE:
Appearance		Clear
Liquid Density	@ 25 °C (77 °F)	1.13 g/cm <sup>3</sup>
Solid Density	@ 25 °C (77 °F)	1.21 g/cm <sup>3</sup>
Viscosity	@ 30 °C (86 °F)	150 - 180 cps
Penetration Depth (Dp) *		6.3 mils
Critical Exposure (Ec) *		7.6 mJ/cm <sup>2</sup>
Tested Build Styles		EXACT™, FAST™, QuickCast™

### Post-Cured Material

MEASUREMENT	CONDITION	VALUE:
Tensile Strength	ASTM D 638	58 - 68 MPa (8410 - 9860 PSI)
Tensile Modulus	ASTM D 638	2690 - 3100 MPa (390 - 450 KSI)
Elongation at Break (%)	ASTM D 638	5 - 13 %
Flexural Strength	ASTM D 790	87 - 101 MPa (12620 - 14650 PSI)
Flexural Modulus	ASTM D 790	2700 - 3000 MPa (392 - 435 KSI)
Impact Strength (Notched Izod)	ASTM D 256	15 - 25 J/m (0.3 - 0.5 ft- lb/in)
Heat Deflection Temperature	ASTM D 648 @ 66 PSI @ 264 PSI	53 - 55 °C (127 - 131 °F) 48 - 50 °C (118 - 122 °F)
Hardness, Shore D		86
Co-efficient of Thermal Expansion	ASTM E 831-93 TMA (T<Tg, 0 - 40 °C) TMA (T<Tg, 75 - 140 °C)	71 µm/m-°C 153 µm/m-°C
Glass Transition (Tg)	DMA, E"	58 °C (136 °F)

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



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