3D Systems Accura® SI 40 Plastic for the SLA® 500 System

Category : Polymer , Rapid Prototyping Polymer

Material Notes:

Accura 40 "Ar" or "Hc" type materials - for the SLA 500 system. Mimics Nylon 6:6ApplicationsHigh temperature testing:Under hood bolt-on testingWind tunnel testingHVAC testingPrototyping and testing of rigid cases and enclosuresFlow visualizationDrilling and self-tappingPressure tappingsSnap fit assembliesRTV mold patternsFeaturesStiffness matches nylon 6:6High heat resistance without brittlenessGood durabilityOutstanding accuracy with minimal distortionFully developed and tested build stylesAll information provided by 3D Systems.

Order this product through the following link:
http://www.lookpolymers.com/polymer_3D-Systems-Accura-SI-40-Plastic-for-the-SLA-500-System.php

Physical Properties	Metric	English	Comments
Density	1.10 g/cc @Temperature 25.0 °C	0.0397 lb/in³ @Temperature 77.0 °F	Liquid
Viscosity	485 cP @Temperature 30.0 °C	485 cP @Temperature 86.0 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	87	87	90 Minute UV Cure; ASTM D2240
	87	87	90 Minute UV Cure + Thermal; ASTM D2240
Tensile Strength, Yield	61.5 - 62.2 MPa	8920 - 9020 psi	90 Minute UV Cure; ASTM D638
	75.0 - 76.7 MPa	10900 - 11100 psi	90 Minute UV Cure + Thermal; ASTM D638
Elongation at Break	4.1 - 4.3 %	4.1 - 4.3 %	90 Minute UV Cure; ASTM D638
	5.9 - 7.5 %	5.9 - 7.5 %	90 Minute UV Cure + Thermal; ASTM D638
Tensile Modulus	2.84 - 3.048 GPa	412 - 442.1 ksi	90 Minute UV Cure; ASTM D638
	3.047 - 3.532 GPa	441.9 - 512.3 ksi	90 Minute UV Cure + Thermal; ASTM D638
Flexural Strength	102 - 107 MPa	14800 - 15500 psi	90 Minute UV Cure; ASTM D790
	117 - 119.1 MPa	17000 - 17270 psi	90 Minute UV Cure + Thermal; ASTM D790
Flexural Modulus	3.186 - 3.255 GPa	462.1 - 472.1 ksi	90 Minute UV Cure; ASTM D790
	3.186 - 3.255 GPa	462.1 - 472.1 ksi	90 Minute UV Cure + Thermal; ASTM D790

Mechanical Properties	Metric	English	Comments
Izod Impact, Notched	0.223 - 0.299 J/cm	0.418 - 0.560 ft-lb/in	90 Minute UV Cure; ASTM D256
	0.223 - 0.299 J/cm	0.418 - 0.560 ft-lb/in	90 Minute UV Cure + Thermal; ASTM D256
Penetration	4.2	4.2	mils

Thermal Properties	Metric	English	Comments
CTE, linear	80.6 µm/m-°C	44.8 µin/in-°F	90 Minute UV Cure + Thermal; T<Tg; ASTM E831-93
	89.2 µm/m-°C	49.6 µin/in-°F	90 Minute UV Cure; T<Tg; ASTM E831-93
	157 µm/m-°C	87.2 µin/in-°F	90 Minute UV Cure + Thermal; T>Tg; ASTM E831-93
	190 µm/m-°C	106 µin/in-°F	90 Minute UV Cure; T>Tg; ASTM E831-93
Deflection Temperature at 0.46 MPa (66 psi)	54.0 °C	129 °F	90 Minute UV Cure; ASTM D648
	114 °C	237 °F	90 Minute UV Cure + Thermal; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	49.0 °C	120 °F	90 Minute UV Cure; ASTM D648
	89.0 °C	192 °F	90 Minute UV Cure + Thermal; ASTM D648
Glass Transition Temp, Tg	75.9 °C	169 °F	90 Minute UV Cure; DMA, E"
	90.0 °C	194 °F	90 Minute UV Cure + Thermal; DMA, E"

Descriptive Properties	Value	Comments
Appearance	Clear amber	
Critical Exposure (mJ/cm²)	11.3	
Tested Build Styles	EXACT™	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China