Somos® Taurus (preliminary)

Expands your prototyping capabilites

Product Description

Somos® Taurus is the latest addition to the high impact family of stereolithography (SLA) materials from Somos®. Parts printed with this material are easy to clean and finish. The higher heat deflection temperature of this material increases the number of applications for the part producer and user. Until now, this combination of thermal and mechanical performance was only acheivable using other polymer 3D printing techniques (such as FDM and SLS).

By using Somos® Taurus to print your parts, you get the added value of excellent surface quality and isotropy, enabling reduced job times for highly detailed parts with more uniform performance. The darker color of Somos® Taurus also gives an added richness to your parts to minimize part finishing and painting.

Key Benefits

- Superior strength and durability
- Wide range of applications
- Excellent surface and large part accuracy
- Heat tolerance up to 90°C
- Thermoplastic-like performance, look and feel

Ideal Applications

- Customized end-use parts
- Tough, functional prototypes
- Automotive
- Aerospace
- Electronics

Somos® Taurus Technical Data (preliminary)

Liquid Properties		Optical Properties		
Appearance	Charcoal	E_C	7.8 mJ/cm²	[critical exposure]
Viscosity	~360 cps @ 30°C	D_P	4.4 mils	[slope of cure-depth vs. ln (E) curve]
Density	~1.13 g/cm³ @ 25°C	E_{10}	76 mJ/cm²	[exposure that gives 0.254 mm (.010 inch) thickness]

Mechanical Properties		UV Postcure		UV & Thermal Postcure	
ASTM Method	Property Description	Metric	Imperial	Metric	Imperial
D638M	Tensile Modulus	2,240 MPa	325 ksi	2,300 MPa	334 ksi
D638M	Tensile Strength at Yield	45 MPa	6.5 ksi	51 MPa	7.4 ksi
D638M	Elongation at Break	23%		19%	
D256A	Izod Impact (Notched)	50.7 J/m	0.95 ft-lb/in	34.2 J/m	0.64 ft-lb/in
D570-98	Water Absorption	0.63%		0.60%	
Thermal/Electrical Properties		UV Postcure		UV & Thermal Postcure	
ASTM Method	Property Description	Metric	Imperial	Metric	Imperial
D648	HDT @ 0.46 MPa (66 psi)	63°C	145°F	95°C	203°F
D648	HDT @ 1.81 MPa (264 psi)	47°C	117°F	75°C	167°F

These values may vary and depend on individual machine processing and post-curing practices.

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