Somos High-toughness ABS-like Resin (Evolve 128)

Description

Somos Evolve 128 is a durable stereolithography material that produces precise, highly detailed parts and is designed for easy finishing. Its look and feel is almost indistinguishable from finished traditional thermoplastics, making it perfect for building parts and prototypes for functional testing applications and resulting in time, money and material savings during product development.



Features

[Print size]: 600*600*400 mm

[Features]: Smooth surface, high strength and durability, precise and dimensionally stable, and high

detail.

Color: White

Advantages: Easy to clean and finish, high strength and durability, precise and dimensionally stable,

and high detail

Disadvantages: Not UV resistant, low heat resistance

Recommended applications: Aerospace, automotive, medical, consumer goods and electronics

Parameters

Fluid Properties		Optical Properties			
Appearance	White	Ee	9.3 mJ/cm2	[Critical exposure]	
Viscosity	~380 cps @ 30° °C	D	4.3 mils	[Slope of Penetration Depth vs In (E) Curve]	
Density	~1.12 g/cm ³ @25°C	E	95.1 mJ/cm2	[Exposure up to a thickness of 0.254 mm (.o1o inch)]	

Mechanical Propertie	s	UV post-curing			
ASTM	Property Description	Metric	Imperial		
D638M	Tensile Modulus	2,964 MPa	43o ksi		
D638M	Tensile Strength at Yield	56.8 MPa	8.2 ksi		
D638M	Elongation at Break		11%		
D2240	Flexural Modulus	2,654 MPa	385 ksi		
D256A	Izod Impact- Notched	38.9 J/m	0.729 ft-1b/in		
D2240	D2240 Hardness - Shore D		82		
D570-98	9570-98 Water Absorption		0.40%		
Thermal/Electrical Pr	operties	UV post-curing			
ASTM	Property Description	Metric	Imperial		
E831-05	C.T.E40-0°C (-40-32°F)	56.5 μm/m°C	31.4 μin/in°F		
E831-05	C.T.E.0-50°C (32-122°F)	76.5 μm/m°C	42.5 μin/in°F		
E831-05	C.T.E.50-100°C (122-212°F)	163 μm/m°C	90.8 μin/in°F		
E831-05	C.T.E.100-150°C (212-302°F)	174 μm/m°C	96.5 μin/in°F		
D150-98	Dielectric Constant, 60 Hz		3.9		
D150-98	Dielectric Constant, 1 KHz		3.7		
D150-98	Dielectric Constant, 1 MHz		3.5		
D149-97a	Dielectric Strength	31 kV/mm	788 V/mil		
D648	HDT@0.46 MPa (66 psi)	52.3°C	126°F		
D648	HDT@1.81MPa (264 psi)	49.6°C	121°F		