

Somos® 9120

Unspecified

DSM Somos®

Message:

DSM's Somos® 9120 is a liquid photopolymer that produces robust, functional and accurate parts using stereolithography machines. The material offers superior chemical resistance and a wide processing latitude. With mechanical properties that mimic many engineering plastics, parts created from Somos® 9120 exhibit superior fatigue properties, strong memory retention and high quality up-facing and down-facing surfaces. Somos® 9120 also offers a good balance of properties between rigidity and functionality.

Applications

This photopolymer is used in solid imaging processes, like stereolithography, to build three-dimensional parts. This material is also useful in creating parts for applications where durability and robustness are critical requirements (e.g., automobile components, electronic housings, medical products, large panels and snap-fit parts).

General Information			
Features	Durable		
	Fatigue Resistant		
	Good Chemical Resistance		
	Good Surface Finish		
	Good Wear Resistance		
	Medium Rigidity		
Uses	Automotive Applications		
	Electrical/Electronic Applications		
	Housings		
	Medical/Healthcare Applications		
	Prototyping		
Appearance	Off-White		
Forms	Liquid		
Processing Method	3D Printing, Stereolithography		
Physical	Nominal Value	Unit	Test Method
Density	1.13	g/cm³	
Viscosity (30°C)	450	mPa · s	
Deflection Temperature	52 to 61	°C	ASTM D648
Critical Exposure	10.9	mJ/cm²	
Penetration Depth	142.2	µm	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	80 to 82		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1230 to 1460	MPa	ASTM D638
Tensile Strength	30.0 to 32.0	MPa	ASTM D638
Tensile Elongation (Yield)	15 to 25	%	ASTM D638

Flexural Modulus	1310 to 1460	MPa	ASTM D790
Flexural Strength	44.0 to 46.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	48 to 53	J/m	ASTM D256A

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Recommended distributors for this material

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