



# SOMOS® PROTOGEN 18420

Tough, high impact stereolithography material that you can tailor to fit your needs.

## DESCRIPTION

When you need a high-heat and humidity resistant material for your parts, Somos® ProtoGen 18420 delivers the performance you need. This material creates accurate, easy-to-clean parts, ideal for automotive and medical applications.

## BENEFITS

- Tune the properties of the part to fit your needs
- Fast, easy processing & finishing
- Highly accurate

## APPLICATIONS

- Automotive parts
- Medical
- Consumer products
- Electrical casings

## SOMOS® PROTOGEN 18420 TECHNICAL DATA

LIQUID PROPERTIES		OPTICAL PROPERTIES		
Appearance	Off-white	$E_c$	6.7 mJ/cm <sup>2</sup>	[critical exposure]
Viscosity	~350 cps @ 30°C	$D_p$	4.3 mils	[slope of cure-depth vs. ln (E) curve]
Density	~1.16 g/cm <sup>3</sup> @ 25°C	$E_{10}$	68.6 mJ/cm <sup>2</sup>	[exposure that gives 0.254 mm (.010 inch) thickness]

MECHANICAL PROPERTIES		UV POSTCURE	
ASTM METHOD	PROPERTY DESCRIPTION	METRIC	IMPERIAL
D638M	Tensile Modulus	2,250 MPa	6530-6820
D638M	Tensile Strength at Yield	43 MPa	274-354
D638M	Elongation at Break	12 %	
D2240	Flexural Modulus	2,060 MPa	10880-11310
D256A	Izod Impact (Notched)	21 J/m	328-344
D2240	Hardness (Shore D)	87	
D570-98	Water Absorption	0.68%	

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