

## Ineos Nova 3101 General Purpose Crystal Polystyrene

Category : Polymer , Thermoplastic , Polystyrene (PS) , Polystyrene, Transparent Grade

### Material Notes:

Good balance of flow and set-up properties, Good crack resistance  
 Applications: Single service cutlery, Single service drinkware, Consumer electronic packaging  
 Exposure to gamma radiation in the 2.02-6.06 megarad range has no significant effect on the physical and optical properties of the material.  
 Properties were determined on injection molded specimens at 23°C and 50% R.H. unless otherwise specified.  
 Information provided by NOVA Chemicals. INEOS NOVA began October 1 2007 as an expansion of the 50:50 joint venture between NOVA Chemicals and INEOS to include North American assets.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ineos-Nova-3101-General-Purpose-Crystal-Polystyrene.php](http://www.lookpolymers.com/polymer_ineos-Nova-3101-General-Purpose-Crystal-Polystyrene.php)

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in <sup>3</sup>	ASTM D792
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ASTM D955
Melt Flow	11 g/10 min	11 g/10 min	Condition G

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	75	75	
Tensile Strength, Yield	38.0 MPa	5510 psi	ASTM D638
Elongation at Break	1.5 %	1.5 %	ASTM D638
Modulus of Elasticity	3.07 GPa	445 ksi	ASTM D638
Flexural Yield Strength	75.0 MPa	10900 psi	ASTM D790
Flexural Modulus	3.448 GPa	500.1 ksi	ASTM D790
Izod Impact, Notched	0.200 J/cm @Diameter 3.17 mm	0.375 ft-lb/in @Diameter 0.125 in	bar, 0.010" notch radius; ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	91.0 °C	196 °F	ASTM D648
Vicat Softening Point	99.0 °C	210 °F	ASTM D1525
Flammability, UL94	HB	HB	

Optical Properties	Metric	English	Comments
	1.59	1.59	

Refractive Index Optical Properties	Metric @ Wavelength 589.3 nm	English @ Wavelength 589.3 nm	sodium D line Comments
Optical Density	0.046	0.046	400-700 nm avg.
Transmission, Visible	88 - 90 %	88 - 90 %	at 550 nm

Electrical Properties	Metric	English	Comments
Dielectric Constant	2.59 @Frequency 1e+6 Hz	2.59 @Frequency 1e+6 Hz	
Dielectric Strength	19.7 kV/mm @Thickness 3.17 mm	500 kV/in @Thickness 0.125 in	

Processing Properties	Metric	English	Comments
Melt Temperature	190 - 274 Â°C	374 - 525 Â°F	
Mold Temperature	38.0 - 82.0 Â°C	100 - 180 Â°F	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China