

# INEOS Novodur<sup>®</sup> H802

Categories: Polymer; Thermoplastic; ABS Polymer; Acrylonitrile Butadiene Styrene (ABS), Heat Resistant, Molded  
 Material Notes: Novodur H802 is a high heat injection molding grade with high stiffness, especially suitable for being painted.  
 Information provided by Styrolution

Physical Properties	Metric	English	Comments
Density	1.05 g/cc	0.0379 lb/in <sup>3</sup>	ISO 1183
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ISO 294-4
Melt Flow	8.0 g/10 min @Load 10.0 kg, Temperature 220 °C	8.0 g/10 min @Load 22.0 lb, Temperature 428 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	115 MPa	16700 psi	ISO 2039-1
Tensile Strength, Yield	51.0 MPa	7400 psi	ISO 527
Elongation at Yield	2.8 %	2.8 %	ISO 527
Tensile Modulus	2.70 GPa	392 ksi	ISO 527
Charpy Impact Unnotched	8.00 J/cm <sup>2</sup> @Temperature -30.0 °C	38.1 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179
	10.0 J/cm <sup>2</sup> @Temperature 23.0 °C	47.6 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179
Charpy Impact, Notched	0.700 J/cm <sup>2</sup> @Temperature -30.0 °C	3.33 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179
	1.50 J/cm <sup>2</sup> @Temperature 23.0 °C	7.14 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	IEC 60093
Dielectric Constant	3.1 @Frequency 100 Hz	3.1 @Frequency 100 Hz	IEC 60250
Dielectric Strength	34.0 kV/mm @Thickness 1.50 mm	864 kV/in @Thickness 0.0591 in	Short Time; IEC 60243-1

Dissipation Factor	0.0060 @Frequency 100 Hz	0.0060 @Frequency 100 Hz	IEC 60250
	0.010 @Frequency 1e+6 Hz	0.010 @Frequency 1e+6 Hz	IEC 60250

Comparative Tracking Index	600 V	600 V	IEC 60112
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Thermal Properties	Metric	English	Comments
CTE, linear	80.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	44.4 $\mu\text{in}/\text{in}\cdot\text{°F}$	ISO 11359

Deflection Temperature at 0.46 MPa (66 psi)	107 °C	225 °F	ISO 75
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Deflection Temperature at 1.8 MPa (264 psi)	101 °C	214 °F	ISO 75
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Vicat Softening Point	109 °C @Load 5.10 kg	228 °F @Load 11.2 lb	50°C/h; ISO 306
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Processing Properties	Metric	English	Comments
Melt Temperature	230 - 270 °C	446 - 518 °F	ISO 294

Mold Temperature	70.0 °C	158 °F	ISO 294
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Injection Velocity	240 mm/sec	9.45 in/sec	ISO 294
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Drying Temperature	80.0 °C @Time 7200 - 14400 sec	176 °F @Time 2.00 - 4.00 hour	
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