

INEOS[®] 2802

Terlux[®] 2802 is a standard injection molding grade based on a MABS polymer. Terlux[®] 2802 offers an unique combination of properties, such as a balanced stiffness/toughness ratio and the high transparency well known in SAN molding compositions. Excellent transparency, Good resistance to chemicals, Good stiffness and surface finish, High impact strength.

Applications: Cosmetic packaging, Housewares, Housings, Toys, sport and leisure.

Physical Properties	Metric	English	Comments
Bulk Density	0.590 g/cc	0.0213 lb/in ³	with external lubricant
Density	1.08 g/cc	0.0390 lb/in ³	ISO 1183
Water Absorption at Saturation	0.70 % @Temperature 23.0 °C	0.70 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ISO 294-4
Melt Flow	2.0 g/10 min @Load 10.0 kg, Temperature 220 °C	2.0 g/10 min @Load 22.0 lb, Temperature 428 °F	Volumetric; cm ³ /10 min; ISO 1133
	17 g/10 min @Load 21.6 kg, Temperature 220 °C	17 g/10 min @Load 47.6 lb, Temperature 428 °F	Volumetric; cm ³ /10 min; ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	70.0 MPa	10200 psi	ISO 2039-1
Tensile Strength, Yield	48.0 MPa	6960 psi	ISO 527
Elongation at Break	12 %	12 %	Nominal; ISO 527
Elongation at Yield	4.0 %	4.0 %	ISO 527
Tensile Modulus	2.00 GPa	290 ksi	ISO 527
Flexural Strength	70.0 MPa	10200 psi	ISO 178
Izod Impact, Notched	0.690 J/cm @Thickness 3.17 mm	1.29 ft-lb/in @Thickness 0.125 in	ASTM Test
Charpy Impact Unnotched	8.00 J/cm ² @Temperature -30.0 °C	38.1 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	12.0 J/cm ² @Temperature 23.0 °C	57.1 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.200 J/cm ² @Temperature -30.0 °C	0.952 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	0.500 J/cm ² @Temperature 23.0 °C	2.38 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA
Tensile Creep Modulus, 1000 hours	1250 MPa	181000 psi	ISO 899

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	2.9 @Frequency 100 Hz	2.9 @Frequency 100 Hz	IEC 60250
Dissipation Factor	0.014 @Frequency 1e+6 Hz	0.014 @Frequency 1e+6 Hz	IEC 60250

	0.016 @Frequency 100 Hz	0.016 @Frequency 100 Hz	IEC 60250
Thermal Properties	Metric	English	Comments
CTE, linear	80.0 - 110 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	44.4 - 61.1 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ISO 11359
Thermal Conductivity	0.170 W/m-K	1.18 BTU-in/hr-ft ² -°F	DIN 52612-1
Deflection Temperature at 0.46 MPa (66 psi)	94.0 °C	201 °F	annealed 4 hours at 80°C; ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	90.0 °C	194 °F	annealed 4 hours at 80°C; ISO 75
Vicat Softening Point	93.0 °C @Load 5.10 kg	199 °F @Load 11.2 lb	VST/B/50. 50C/h; ISO 306
	105 °C @Load 1.02 kg	221 °F @Load 2.25 lb	VST/A/50. 50C/h; ISO 306
Optical Properties	Metric	English	Comments
Refractive Index	1.54	1.54	Sodium D Line; ISO 489
Processing Properties	Metric	English	Comments
Melt Temperature	230 - 260 °C	446 - 500 °F	ISO 294
Mold Temperature	50.0 - 75.0 °C	122 - 167 °F	ISO 294
Injection Velocity	200 mm/sec	7.87 in/sec	ISO 294
Drying Temperature	70.0 °C @Time 7200 sec	158 °F @Time 2.00 hour	
Compliance Properties	Metric	English	Comments
NSF	No	No	NSF Std. 51
	No	No	NSF Std. 61