

INEOS[®] HD 2802

erlux[®] HD 2802 is a standard injection molding grade based on a MABS polymer. Terluc[®] HD 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, HD service package available.

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
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 $\mu\text{m}/\text{m}\cdot\text{C}$	44.4 - 61.1 $\mu\text{in}/\text{in}\cdot\text{F}$	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	