

Idemitsu Kosan TARFLON™ LC1402

Light guiding, High flow, Good color tone.

General Tarflon™ Information: Polycarbonate is known for its high impact resistance, good transparency and heat resistance, and superb precision and electrical properties.

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in ³	ISO 1183(JIS K7112)
Moisture Absorption	0.230 % @Time 86400 sec	0.230 % @Time 24.0 hour	50% RH; ISO 62(JIS K7209)
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	Idemitsu Method
Linear Mold Shrinkage, Transverse	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	Idemitsu Method
Melt Flow	150 g/10 min @Load 1.20 kg, Temperature 300 °C	150 g/10 min @Load 2.65 lb, Temperature 572 °F	ISO 1133 (JIS K7210)
Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	120	120	ISO 2039-2 (JIS K7202-2)
Tensile Strength, Yield	65.0 MPa	9430 psi	ISO 527-1,2 (JIS K7161, 7162)
Elongation at Break	15 %	15 %	ISO 527-1,2 (JIS K7161, 7162)
Flexural Strength	100 MPa	14500 psi	ISO 178 (JIS K7171)
Flexural Modulus	2.30 GPa	334 ksi	ISO 178 (JIS K7171)
Charpy Impact, Notched	0.900 J/cm ²	4.28 ft-lb/in ²	ISO 179-1 (JIS K7111)
Thermal Properties	Metric	English	Comments
CTE, linear	65.0 µm/m-°C	36.1 µin/in-°F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	130 °C	266 °F	ISO 75-1,2 (JIS K7191-1,2)
Deflection Temperature at 1.8 MPa (264 psi)	120 °C	248 °F	ISO 75-1,2 (JIS K7191-1,2)

UL RTI, Electrical	80.0 °C	176 °F	UL746B
UL RTI, Mechanical with Impact	80.0 °C	176 °F	UL746B
UL RTI, Mechanical without Impact	80.0 °C	176 °F	UL746B
Flammability, UL94	V-2 @Thickness 0.400 mm	V-2 @Thickness 0.0157 in	NC

Optical Properties	Metric	English	Comments
Refractive Index	1.585	1.585	ASTM D542
Haze	0.50 % @Thickness 3.00 mm	0.50 % @Thickness 0.118 in	ASTM D1003
Transmission, Visible	90 %	90 %	Total Luminous; ISO 13468-1 (JIS K7361-1)

Processing Properties	Metric	English	Comments
Melt Temperature	280 - 350 °C	536 - 662 °F	Cylinder Temperature
Mold Temperature	80.0 - 110 °C	176 - 230 °F	
Drying Temperature	120 °C @Time 18000 - 28800 sec	248 °F @Time 5.00 - 8.00 hour	