

Idemitsu Kosan TARFLON™ URC2500

Highly reflective, light shielding effect, Flame-retardant V-0.

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	1.28 g/cc	0.0462 lb/in ³	ISO 1183(JIS K7112)

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	35.84 g/10 min @Load 1.20 kg, Temperature 300 °C	35.84 g/10 min @Load 2.65 lb, Temperature 572 °F	ISO 1133 (JIS K7210)
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Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	60.0 MPa	8700 psi	ISO 527-1,2 (JIS K7161, 7162)

Elongation at Break	70 %	70 %	ISO 527-1,2 (JIS K7161, 7162)
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Flexural Strength	90.0 MPa	13100 psi	ISO 178 (JIS K7171)
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Flexural Modulus	2.40 GPa	348 ksi	ISO 178 (JIS K7171)
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Charpy Impact, Notched	4.00 J/cm ²	19.0 ft-lb/in ²	ISO 179-1 (JIS K7111)
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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)	138 °C	280 °F	ISO 75-1,2 (JIS K7191-1,2)
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Deflection Temperature at 1.8 MPa (264 psi)	126 °C	259 °F	ISO 75-1,2 (JIS K7191-1,2)
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UL RTI, Electrical	80.0 °C	176 °F	UL746B
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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-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	WT

Optical Properties	Metric	English	Comments
Transmission, Visible	0.60 %	0.60 %	Total Luminous; ISO 13468-1 (JIS K7361-1). 1mm

Reflection Coefficient, Visible (0-1)	0.97	0.97	Light Reflection Rate (Y); D65 type,10°
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Processing Properties	Metric	English	Comments
Melt Temperature	260 - 280 °C	500 - 536 °F	Cylinder Temperature
	<= 300 °C	<= 572 °F	Max Cylinder Temperature
Mold Temperature	80.0 - 90.0 °C	176 - 194 °F	
Drying Temperature	120 °C @Time 18000 - 28800 sec	248 °F @Time 5.00 - 8.00 hour	