

Idemitsu Kosan TARFLON™ RY2200

Transparency.

Polycarbonate is known for its high impact resistance, good transparency and heat resistance, and superb precision and electrical properties. TARFLON is used in a wide range of applications such as house wares, office equipment , mobile devices, communications equipment, display devices such as LCD backlight parts, automotive, lighting and many fields.

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)
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Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 2.00 mm	0.0050 - 0.0070 in/in @Thickness 0.0787 in	Idemitsu Method
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Linear Mold Shrinkage, Transverse	0.0050 - 0.0070 cm/cm @Thickness 2.00 mm	0.0050 - 0.0070 in/in @Thickness 0.0787 in	Idemitsu Method
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Melt Flow	14.4 g/10 min @Load 1.20 kg, Temperature 300 °C	14.4 g/10 min @Load 2.65 lb, Temperature 572 °F	ISO 1133 (JIS K7210)
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Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	50	50	ISO 2039-2 (JIS K7202-2)

Hardness, Rockwell R	120	120	ISO 2039-2 (JIS K7202-2)
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Tensile Strength, Yield	65.0 MPa	9430 psi	ISO 527-1,2 (JIS K7161, 7162)
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Elongation at Break	95 %	95 %	Nominal; 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	2.30 GPa	334 ksi	ISO 178 (JIS K7171)
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Charpy Impact, Notched	8.00 J/cm ² @Temperature 23.0 °C	38.1 ft-lb/in ² @Temperature 73.4 °F	ISO 179-1(JIS K7111)
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Electrical Properties	Metric	English	Comments
Dielectric Constant	2.85 @Frequency 1e+6 Hz	2.85 @Frequency 1e+6 Hz	IEC 60250

Dielectric Strength	30.0 kV/mm	762 kV/in	IEC 60243-1 (JIS C2110)
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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 1.8 MPa (264 psi)	125 °C	257 °F	ISO 75-1,2 (JIS K7191-1,2)
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UL RTI, Electrical	130 °C @Thickness 1.50 mm	266 °F @Thickness 0.0591 in	UL746B
UL RTI, Mechanical with Impact	125 °C @Thickness 1.50 mm	257 °F @Thickness 0.0591 in	UL746B
UL RTI, Mechanical without Impact	130 °C @Thickness 1.50 mm	266 °F @Thickness 0.0591 in	UL746B
Flammability, UL94	V-0 @Thickness 3.00 mm	V-0 @Thickness 0.118 in	

Optical Properties	Metric	English	Comments
Transmission, Visible	85 - 89 %	85 - 89 %	Total Luminous; ISO 13468-1 (JIS K7361-1)

Processing Properties	Metric	English	Comments
Melt Temperature	260 - 300 °C	500 - 572 °F	Cylinder Temperature
	<= 320 °C	<= 608 °F	Max Cylinder Temperature
Mold Temperature	80.0 - 120 °C	176 - 248 °F	
Drying Temperature	120 °C @Time 18000 - 28800 sec	248 °F @Time 5.00 - 8.00 hour	