

Typical property table

**Polycarbonate resin TARFLON™ / TARFLON™**

**IV2200R**



Formosa Idemitsu Petrochemical Corporation (FIPC)

UV-stabilized PC with UV cut-off under 380 nm, iced-clear color, and good mold release property.  
This grade is listed in AMECA, can be used for car headlamp, lighting equipment and various outdoor applications,  
and is also rated UL f1.

Property	Method	Units	IV2200R
ISO identification mark	-	-	>PC<
<b>Physical</b>			
MFR	ISO 1133	g/10min	11
Density	ISO 1183	g/cm <sup>3</sup>	1.2
Water absorption (50%RH 24hr)	ISO 62	%	0.23
<b>Mechanical</b>			
Tensile stress at Yield	ISO 527-1,2	MPa	65
Tensile strain at break	ISO 527-1,2	%	95
Flexural strength	ISO 178	MPa	90
Flexural modulus	ISO 178	GPa	2.3
Charpy impact strength(Notched)	ISO 179-1	kJ/m <sup>2</sup>	80
Rockwell hardness	ISO 2039-2	R/M scale	R120/M50
<b>Thermal</b>			
Heat deflection temperature (1.8 MPa)	ISO 75-1,2	°C	125
Linear thermal expansion coefficient	ISO 11359-2	x 10 <sup>-5</sup> /°C	6.5
Mold shrinkage	ASTM D955	%	0.5 ~ 0.7
<b>Optical</b>			
Total luminous transmittance	ISO 13468-1	%	85 ~ 90
<b>Electrical</b>			
Dielectric strength	IEC 60243-1	kV/mm	30
Volume resistivity	ASTM D257	Ω • cm	> 10 <sup>16</sup>
Dielectric Constant (1 MHz)	IEC 60250	-	2.85
Dielectric dissipation factor (1 MHz)	IEC 60250	-	0.0092
<b>UL rating</b>			
Flammability	UL94	(Class)	V-2 (0.36 ~ 2.9 mm) HB (3.0 ~ 6.0mm)
CTI	UL746A	(PLC level)	2
RTI (Elec)	UL746B	°C	130
RTI (Imp)	UL746B	°C	125
RTI (Str)	UL746B	°C	130
UV, water exposure or immersion	UL746C	-	f1
<b>Standard molding parameters</b>			
Pre-drying condition	-	-	120 °C, 5~8hours
Cylinder temperature	-	-	260 ~ 300 °C (Max.320 °C)
Mold temperature	-	-	80 ~ 120 °C

UL file No. QMFZ2.E238753

The above typical data are supplied only for technical information, not guaranteed values.  
This document may be revised without prior notice.

rev. 2019.3.13