



**TARFLON™ Property Table (General Purpose/Weather Resistance Polycarbonate)**

Properties				Super high flow	High flow	Standard	Medium viscosity
ISO Identification Mark				#1700	#1900	#2200	#2500
Grade				>PC<	>PC<	>PC<	>PC<
Standard				-	A1900	A2200	-
Superior mold-release Ice color				IR1700	IR1900	IR2200	IR2500
Weather resistance Superior mold-release Ice color				-	IV1900R	IV2200R	-
Properties	Units	Test Method	condition				
Density	g/cm <sup>3</sup>	ISO 1183 (JIS K7112)		1.2	1.2	1.2	1.2
Water Absorption	%	ISO 62 (JIS K7209)	24h 50%RH	0.23	0.23	0.23	0.23
Fluidity							
Melt Volume-Flow Rate (MVR)	cm <sup>3</sup> /10min	ISO 1133 (JIS K7210)		300°C 1.20kg	300°C 1.20kg	300°C 1.20kg	300°C 1.20kg
				27	19	12	8
Spiral Flow Length	cm	Idemitsu Method		Thickness:2mm/Width:10mm Cylinder:280°C/Mold:80°C Inj.Pressure:125MPa	Thickness:2mm/Width:10mm Cylinder:280°C/Mold:80°C Inj.Pressure:125MPa	Thickness:2mm/Width:10mm Cylinder:280°C/Mold:80°C Inj.Pressure:125MPa	Thickness:2mm/Width:10mm Cylinder:280°C/Mold:80°C Inj.Pressure:125MPa
				25	20	16	12
Mechanical properties							
Tensile Stress at Yield*1	MPa	ISO 527-1,2 (JIS K7161, 7162)		Y65	Y65	Y65	Y65
Nominal tensile strain at break*2	%			tB95	tB95	tB95	tB90
Flexural Strength	MPa	ISO 178 (JIS K7171)		90	90	90	90
Flexural Modulus	GPa			2.3	2.3	2.3	2.2
Charpy Impact Strength	kJ/m <sup>2</sup>	ISO 179-1 (JIS K7111)	notched at 23°C	40	70	80	80
Rockwell Hardness	-	ISO 2039-2 (JIS K7202-2)	R scale/ M scale	R120/M50	R120/M50	R120/M50	R120/M50
Thermal properties							
Temperature of deflection under load	°C	ISO 75-1,2 (JIS K7191-1,2)	0.45MPa	-	-	-	-
			1.8MPa	125	125	125	130
Linear Thermal Expansion coefficient	×10 <sup>-5</sup> /°C	ISO 11359-2		6.5	6.5	6.5	6.5
Mould Shrinkage	%	Idemitsu Method	2mm MD	0.5~0.7	0.5~0.7	0.5~0.7	0.5~0.7
	%		2mm TD	0.5~0.7	0.5~0.7	0.5~0.7	0.5~0.7
Optical properties							
Total Luminous Transmittance	%	ISO 13468-1 (JIS K7361-1)	3mm	85~89	85~89	85~89	85~89
Flammability							
Flammability Rating	mm thickness	UL94	class/mini-thickness	V-2/0.36	V-2/0.36	V-2/0.36	V-2/0.36
Comparative tracking index(CTI)	PLC level	UL746A		2	2	2	2
Thermal Index RTI Elec	°C	UL746B		130(0.36mm)	130(0.36mm)	130(0.36mm)	130(1.5mm)
RTI Imp			125(0.36mm)	125(0.36mm)	125(0.36mm)	125(1.5mm)	
RTI Str			130(0.36mm)	130(0.36mm)	130(0.36mm)	130(1.5mm)	
Electrical properties							
Dielectric Strength	kV/mm	IEC 60243-1 (JIS C2110)		30	30	30	30
Arc Resistance	PLC level	ASTM D495		6	6	6	6
Volume Resistivity	Ω·cm	ASTM D257		1E+16<	1E+16<	1E+16<	1E+16<
Dielectric Constant	-	IEC 60250	100Hz	2.91	2.91	2.91	2.91
	-		1MHz	2.85	2.85	2.85	2.85
Dielectric dissipation Factor	-		100Hz	0.00066	0.00066	0.00066	0.00066
	-		1MHz	0.0092	0.0092	0.0092	0.0092
Standard Molding Parameters							
Cylinder Temperature				260~300°C (Maximum320°C)	260~300°C (Maximum320°C)	260~300°C (Maximum320°C)	260~300°C (Maximum320°C)
Mold Temperature				80~120°C	80~120°C	80~120°C	80~120°C
Pre-drying condition				120°C, 5~8hours	120°C, 5~8hours	120°C, 5~8hours	120°C, 5~8hours

\*1 Y:Yield strength  
\*2 tB : Nominal tensile strain at break

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