



Property Table (PC alloy grade)



Features	For plating			For plating		Chemical resistance High strength	Chemical resistance High strength			
	Grades	SC-170	SC-253	SC-300	SC-420					
Properties	Units	Test Method	condition	>PC+ABS<	>PC+ABS<	>PC+PET<	>PC+PET<			
Density	g/cm ³	ISO 1183 (JIS K7112)		1.11	1.11	1.21	1.21			
Water Absorption	%	ISO 62 (JIS K7209)	24h 50%RH	0.23	0.23	0.25	0.25			
Fluidity										
Melt Volume-Flow Rate (MVR)	cm ³ /10min	ISO 1133 (JIS K7210)		—	—	—	280°C 2.16kg 8			
Spiral Flow Length	cm	Idemitsu Method		Thickness:3mm/Width:10mm Cylinder:280°C/Mold:80°C Inj.Pressure:125MPa 48	Thickness:3mm/Width:10mm Cylinder:260°C/Mold:80°C Inj.Pressure:125MPa 60	Thickness:3mm/Width:10mm Cylinder:280°C/Mold:80°C Inj.Pressure:125MPa 28	Thickness:3mm/Width:10mm Cylinder:280°C/Mold:80°C Inj.Pressure:125MPa 47			
Mechanical properties										
Tensile Stress at Yield*1	MPa	ISO 527-1,2 (JIS K7161, 7162)		Y50	Y45	Y60	Y60			
Nominal tensile strain at break*2	%			tB85	tB95	tB100	tB100			
Flexural Strength	MPa	ISO 178 (JIS K7171)		65	60	90	80			
Flexural Modulus	GPa			1.95	1.7	2.2	2.2			
Charpy Impact Strength	kJ/m ²	ISO 179-1 (JIS K7111)	notched at 23°C	50	50	74	70			
Rockwell Hardness	—	ISO 2039-2 (JIS K7202-2)	R scale/ M scale	R100	R95	R120	R120			
Thermal properties										
Temperature of deflection under load	°C	ISO 75-1,2 (JIS K7191-1,2)	0.45MPa 1.8MPa	— 100	— 100	— 114	— 109			
Linear Thermal Expansion coefficient	×10 ⁻⁵ /°C	ISO 11359-2		6.3	6.3	7	7			
Mould Shrinkage	%	Idemitsu Method	2mm MD	0.5~0.7	0.5~0.7	0.6~0.7	0.7~0.8			
	%		2mm TD	0.5~0.7	0.5~0.7	0.6~0.7	0.7~0.8			
Optical properties										
Total Luminous Transmittance	%	ISO 13468-1 (JIS K7361-1)	3mm	—	—	—	—			
Flammability										
Flammability Rating	mm thickness	UL94	class/mini-thickness	—	—	—	—			
Electrical properties										
Dielectric Strength	kV/mm	IEC 60243-1 (JIS C2110)		—	—	—	—			
Arc Resistance	PLC level	ASTM D495		—	—	—	—			
Volume Resistivity	Ω·cm	ASTM D257		—	—	—	—			
Dielectric Constant	—	IEC 60250	1MHz	—	—	—	—			
Dielectric dissipation Factor	—		1MHz	—	—	—	—			
Standard Molding Parameters										
Cylinder Temperature				250~270°C (Maximum280°C)	250~270°C (Maximum280°C)	260~280°C (Maximum300°C)	260~280°C (Maximum300°C)			
Mold Temperature				60~80°C	60~80°C	60~80°C	60~80°C			
Pre-drying condition				110°C, 5~8hours	110°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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