

Physical Properties														
	List	Methodology	Type		High-Modulus			Mid-Modulus		Low Modulus			Opaque	
			Grade	Unit	RT18 (RT18XB)	RT31 (RT31XB)	DX845	DX820	DX231	MX004	DX324	MX002	MX0020	MX001
Basic Properties	Density	MCI Method		kg/m ³	833	833	833	832	832	833	833	834	834	834
	MFR	MCI Method		g/10 min	26	21	9	180	100	25	25	21	21	27
	Melting point	MCI Method		°C	232	232	232	232	232	228	227	224	224	223
	Water sorption	ISO 62		%	≤0.01	≤0.01	≤0.01	≤0.01	0.01	≤0.01	0.01	≤0.01	≤0.01	0.01
Thermal Properties	Vicat Softening Temperature	ISO 306		°C	167	167	167	171	179	161	162	151	149	147
	Heat Distortion Temperature	ISO 75		°C	86	90	93	86	90	80	79	74	72	72
	Coefficient of Linear Expansion	ISO 11359-1		°C ⁻¹ (x10 ⁻⁴)	1.31	-(※1)	1.72	1.03	-(※1)	1.44	-(※1)	1.53	-(※1)	-(※1)
Mechanical Properties	Yield Stress			MPa	23	24	24	-(※2)	26	18	19	14	14	15
	Fractured Stress			MPa	28	29	28	-(※2)	-(※2)	23	22	18	18	18
Mechanical Properties	Fractured Strain			%	67	60	83	3	5	155	80	226	189	211
	Tensile Modulus			MPa	1350	1350	1480	1630	1490	770	690	430	510	490
Mechanical Properties	Flexural Modulus	ISO178		MPa	1530	1530	1520	1600	1550	810	750	530	540	530
	Flexural Strength			MPa	37	40	40	43	41	26	24	18	19	19
	Izod Impact Strength	ISO180 (Part MCI Method)		kJ/m ²	2	2	3	2	1	1	1	2	3	2
Optical Properties	Rockwell Hardness	ISO2039		kJ/m ²	7	6	7	6	6	14	23 (※4)	NB	NB	NB
	Haze	ISO14782		—	80	78	78	94	90	59	55	29	38	37
	Transmittance	ISO14782		%	2.4	2.4	2.8	3.7	3.6	2.5	2.3	2.3	1.6	1.8
	Refractive Index	ISO489		%	93.0	93.0	93.0	92.0	92.0	93.0	92.0	92.0	93.0	92.0
Electrical Properties	Volume Resistivity	IEC60093		Ω·cm	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶
	Dielectric Breakdown Voltage	IEC60243-1		kV/mm	30	29	28	31	31	30	28	29	29	28
	Relative Dielectric Constant	IEC60250		—	2.15	2.12	2.16	2.13	2.12	2.17	2.13	2.19	2.12	2.12
	Spiral Flow	MCI Method		cm	51	51	50			53		56	56	
Moldability	Mold Shrinkage	MCI Method		%	1.6	1.6	1.5			1.7		1.6	1.6	
				%	1.3	1.3	1.4			1.4		1.3	1.3	
	Injection Molding				⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	Extrusion-Coating													
Processing Method	Extrusion-T-Die Casting				⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	Extrusion-Profile Type, Mandrel, Pipe				⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	Extrusion-Fiber Spinning				⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	Direct Blow Molding				⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

Note1 : Figures shown here are representative values but not specified values.

Note2~XB Types are Blue Tint Grade

※1,2 Not Measured / Not Detective

※3 Partially Break

※4 Representative Values due to not specified hammer