

# DURABIO™ Material Properties

Property	Method	Condition	Unit	DURABIO									
				General Grade				Optical Grade		Polymer Alloy/Impact Modified Grade			
				D7340R	D6350R	D5360R	D5380R	T7430A/R	T7450A	DA6610R	DT6010R	DT7010R	DT7121R
				Injection	Injection	Injection	Extrusion	Ext./Inj.	Ext.	Injection	Injection	Injection	Injection
Density	ISO1183		g/cm <sup>3</sup>	1.36	1.34	1.31	1.31	1.36	1.36	1.22	1.30	1.32	1.32
Water Absorption	MCC Method	23°C,24h	wt%	0.3	0.3	0.2	0.2	0.3	0.3	-	-	-	-
MVR	ISO1133	230°C,2.16kg	cm <sup>3</sup> /10min	8	9	10	4	7	4	3	8	7	7
MFR	ISO1133	230°C,2.16kg	g/10min	10	12	13	5	-	-	4	10	8	8
Tensile Modulus	ISO527		MPa	2,700	2,200	2,300	2,300	2,900	2,700	2,000	2,100	2200	2400
Tensile Strength	ISO527		MPa	79	70	64	64	83	83	57	63	68	50
Elongation at Break	ISO527		%	72	110	130	120	24	29	28	120	60	30
Flexural Modulus	ISO178		MPa	2,700	2,500	2,100	2,100	3,000	3,000	2,400	2,200	2,400	2,300
Flexural Strength	ISO178		MPa	116	95	94	94	120	128	88	90	100	96
Charpy Impact Strength	ISO179-1/1eA	With Notch	kJ/m <sup>2</sup>	7	8	9	10	2	5	60	60	27	33
	ISO179-1/1eU	Without Notch	kJ/m <sup>2</sup>	N.B.	N.B.	N.B.	N.B.	N.B.	N.B.	N.B.	N.B.	N.B.	N.B.
Total Light Transmittance	ISO13468	3mmt	%	92	92	92	92	92	92	-	-	-	89
Heat Deflection Temperature	ISO75-1, ISO75-2	1.80MPa	°C	102	90	82	82	111	111	93	89	100	98
	ISO75-1, ISO75-2	0.45MPa	°C	114	101	92	92	-	-	105	100	111	112
Coefficient of Linear Thermal Expansion -20~80°C	ISO11359-2	MD	1/°C	6.9E-05	7.1E-05	7.3E-05	7.3E-05	6.4E-05	6.4E-05	8.0E-05	7.7E-05	7.2E-05	8.0E-05
	ISO11359-2	TD	1/°C	6.9E-05	7.1E-05	7.3E-05	7.3E-05	6.4E-05	6.4E-05	8.0E-05	7.7E-05	7.2E-05	8.0E-05
Remarks	Coloring Ability	Ice Color	D7340IR	✓	D5360IR	D5380IR	T7430IR	-	-	-	-	✓	
		Piano Black(Jet-Black)	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	
		Brilliant Color	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Characteristic		High Heat	Balance	High Impact	High Impact	Optical, Flow-ability	Optical, Extrusion	High Impact	Impact, Flow-ability	Impact, High Heat	Impact, High Heat, Transparent	

All Values are portrayed as general information only and are not product specifications.