

[Materials data sheet] NOVALLY B PBT/ABS

Properties	Test method	Test condition	Unit	General purpose				GF-reinfo
				Standard			Impact resistance	Standard
				—	—	—	—	GF20%
				B1300 B1300F	B1500 B1500F	B1700 B1700F	B14M0	B2504
Mold shrinkage	ASTM D955		%	0.5 – 0.8	0.7 – 0.9	1.2 – 1.4	0.6 – 0.9	0.3 – 0.5
Tensile strength	ISO 527		MPa	38	42	47	40	86
Flexural strength	ISO178		MPa	57	67	74	60	140
Flexural modulus	ISO178		MPa	1800	2200	2400	1900	6000
Charpy notched impact strength	ISO179/1eA	23°C	kJ/m ²	10	3	3	50	8
Izod notched Impact strength	ASTM D256	23°C /6.4mm	J/m	60	30	30	—	80
Deflection temperature under load	ISO 75	1.80MPa	°C	80	80	75	80	130
	ASTM D648	1.82MPa/6.4mm		90	90	85	—	125
	ISO 75	0.45MPa		100	100	150	—	200
	ASTM D648	0.46MPa/6.4mm		100	100	150	—	200
Ball pressure registration temperature	—		°C	—	105	—	—	—
Coefficient of thermal expansion	ISO 11359	MD	×10 ⁻⁵ /°C	10	10	10	10	3
		TD		—	—	—	—	10
Flamabil	UL 94				UL94	UL94		UL94

ity *	UL94		—	—	HB	HB	—	HB
Dielectric strength	ASTM D149	1.5mm	MV/m	—	31	28	—	35
Arc resistance *	ASTM D495	3.0mm	sec (PLC)	— —	101 -6	128 -5	— —	85 -6
Hot wire ignition *	UL746A	1.5mm	sec (PLC)	— —	13 -4	10 -4	— —	50 -2
High ampere arc ignition *	UL746A	1.5mm	(PLC)	— —	150 0	150 0	— —	113 -1
High voltage tracking rate *	UL746A	3.0mm	mm/min (PLC)	— —	17 -1	19 -1	— —	25 -1
Comparative tracking Index *	IEC 112	3.0mm	V (PLC)	— —	600 0	600 0	— —	600 0
Water absorp-tion	ISO 62		%	0.15	0.15	0.15	0.15	0.15
Density	ISO 1183		g/cm ³	1.12	1.17	1.23	1.13	1.31

Forced				Flame retardant				
	Heat resistance	Heat resistance	Low warpage	Standard				Heat resistance
GF30%	GF15%	GF30%	Filler40%	—	GF20%	GF30%	GF30%	GF15%
B2506	B2703	B2706	B3708 (Type K)	B45M0	B5524	B5526	B5546 (Type D)	B5723
0.2 — 0.4	0.4 — 0.7	0.3 — 0.6	0.2 — 0.4	0.6 — 0.8	0.25 — 0.45	0.2 — 0.4	0.2 — 0.4	0.4 — 0.6
103	81	115	100	44	95	110	110	91
150	130	170	160	70	135	160	170	130
8400	5200	8900	11500	2500	6600	9200	9500	5600
9	6	8	7	7	7	8	8	6
90	60	80	60	30	70	80	80	60
140	160	190	190	85	130	140	145	175
150	185	200	200	100	125	155	150	185
205	205	210	210	115	200	210	210	210
205	205	210	210	115	200	210	210	210
—	180	—	—	—	—	160	—	190
2	3	2	3	10	3	2	2	3
10	10	10	8	—	10	10	10	10
TTD	TTD	TTD	TTD	V-0/	V- 0/1.5mm	V-0/	V-0/	V-

HB	HB	HB	HB	1. 2mm	5VA/2. 9m m	1. 5mm	1. 5mm	0/1. 5mm
35	35	35	24	31	30	30	27	29
85	–	–	124	79	69	69	–	–
–6	–	–	–5	–6	–6	–6	–6	–6
50	13	13	13	18	24	24	31	27
–2	–4	–4	–4	–3	–3	–3	–2	–3
113	68	68	19	150	35	35	19	25
–1	–1	–1	–3	0	–2	–2	–3	–3
25	1. 2	1. 2	15	5	187	187	208	87
–1	0	0	–1	0	–4	–4	–4	–3
600	500	500	430	400	210	210	–	225
0	–1	–1	–1	–1	–3	–3	–3	–3
0. 15	0. 15	0. 15	0. 15	0. 15	0. 15	0. 15	0. 15	0. 15
1. 39	1. 33	1. 44	1. 56	1. 32	1. 42	1. 5	1. 5	1. 43

stant
GF30%
B5726
0.3 – 0.5
120
185
9700
8
80
190 200 220 220
200
2 10
V– 0/1.5mm

5VA/2. 0m
m
29
—
—6
27
—3
25
—3
87
—3
225
—3
0. 15
1. 55