

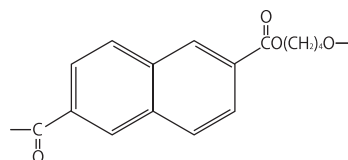
Properties of PBN

PBN 【Poly butylene naphthalate】

TEIJIN CHEMICALS LTD.

帝人化成株式会社

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Property	Test method ASTM	Unit	PBN	PTFE	PPS
Specific gravity	D-792	-	1.31	2.18	1.35
Water absorption 23°C 24hr	D-570	%	0.1	0.01	0.01
Tensile strength (maximum)	D-638	MPa	65	31	93
Elomgation (maximum)	D-638	%	87	400	19
Flexural strength	D-790	MPa	81	6	147
Flexural modulus	D-790	GPa	1.92	0.34	3.4
Impact strength 1/8" (nothced)	D-256	J/m	34	1.5	19
(unnotched)			No broken	-	-
Rockwell hardness	D-785	-	M102	-	R124/M97
Melting point 【Tm】	-	°C	243	327	282
Glass transition temperature 【Tg】	-	°C	78	15~30	86
Load-deflection temperature (1.82MPa)	D-648	°C	77	51	121
Coefficient of linear thermal	D-696	10 ⁻⁵ /K	7.5~9.4	12.2	5.0
Flammability	UL94	-	94HB	V-0	V-0
Volume resistivity	D-257	Ω·m	>10 ¹⁴	10 ¹⁶	10 ¹⁴
Breakdown boltage	D-149	MV/m	42	12	21.3
Dielectric constant (60Hz)	D-150	-	3.6	-	-
(10 ³ Hz)			3.6	-	-
(10 ⁶ Hz)			3.4	2.1	3.0
Dissipation factor (60Hz)	D-150	-	4.2X10 ⁻³	-	-
(10 ³ Hz)			3.9X10 ⁻³	-	-
(10 ⁶ Hz)			23X10 ⁻³	0.1X10 ⁻³	1.3X10 ⁻³
Arc resistance	D-495	sec	84	300	115

The above values are for reference only and are not guaranteed.

EYP090820-PN

