

PBT(Polybutylene terephthalate)

DURANEX®

3316

EF2001/ED3002

(Flame Retardant,
Standard, UL Approved
Regrind 50% Inclusive
grade)

General Properties of 3316

table1-1 General Properties (ISO)

Item	Unit	Test Method	Flame Retardant, Standard, UL Approved Regrind 50% Inclusive
			3316
			GF30% reinforced, Standard
Color			EF2001/ED3002
ISO(JIS)quality-of-the-material display:		ISO11467 (JIS K6999)	>PBT-GF30 FR(17)<
Density	g/cm ³	ISO 1183	1.66
Tensile strength	MPa	ISO 527-1,2	143
Strain at break	%	ISO 527-1,2	2
Flexural strength	MPa	ISO 178	224
Flexural modulus	MPa	ISO 178	10000
Charpy impact strength (notched)	kJ/m ²	ISO 179/1eA	10
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	211
Coefficient of linear thermal expansion (23 ~55°C、Flow direction)	×10 ⁻⁵ /°C	ISO 11359-2	2
Coefficient of linear thermal expansion (23 ~55°C、Transverse direction)	×10 ⁻⁵ /°C	ISO 11359-2	9
Dielectric breakdown strength (Thickness 3mm)	kV/mm	IEC 60243-1	20
Volume resistivity	Ω·cm	IEC 60093	1 × 10 ¹⁶
Surface resistivity	Ω	IEC 60093	1 × 10 ¹⁷
Tracking resistance (CTI)	CTI	IEC 60112	250
Mold Shrinkage (120□×2mmt, Transverse direction, Injection pressure 60MPa)	%		1.15
Mold Shrinkage (120□×2mmt, Flow direction, Injection pressure 60MPa)	%		0.36
Flowability (bar-shaped cavities(2mm deep))	mm		438
Poisson's ratio			0.39
Flammability		UL94	V-0
The yellow card File No.			E213445
Appropriate List number of Ministerial Ordinance for Export Trade Control			Item 16 of Appendix -1

All figures in the table are the typical values of the material and not the minimum values of the material specifications.

table1-1 General Properties (ASTM)

Item	Unit	Test Method	Flame Retardant, Standard, UL Approved Regrind 50% Inclusive
			3316
			GF30% reinforced, Standard
Color			EF2001/ED3002
ISO(JIS)quality-of-the-material display:		ISO11467 (JIS K6999)	>PBT-GF30 FR(17)<
Specific gravity		ASTM D792	1.66
Tensile strength	MPa	ASTM D638	147
Tensile elongation	%	ASTM D638	2.7
Flexural strength	MPa	ASTM D790	225
Flexural modulus	MPa	ASTM D790	9610
Izod impact strength (Notch side, 1/4")	J/m	ASTM D256	98
Izod impact strength (Reversed notch side)	J/m	ASTM D256	680
Izod impact strength (Notch side, 1/8")	J/m	ASTM D256	—
Temperature of deflection under load (1.82MPa)	°C	ASTM D648	212
Coefficient of linear thermal expansion (room temperature, Flow direction)	$\times 10^{-5}/^{\circ}\text{C}$	ASTM D696	2
Coefficient of linear thermal expansion (room temperature, Transverse direction)	$\times 10^{-5}/^{\circ}\text{C}$	ASTM D696	7
Dielectric breakdown strength (Short-time test:1mmt)	MV/m	ASTM D149	—
Dielectric breakdown strength (Short-time test:2mmt)	MV/m	ASTM D149	20
Volume resistivity (Thickness 3mm)	$\Omega \cdot \text{cm}$	ASTM D257	1×10^{16}
Surface resistivity (Thickness 3mm)	Ω	ASTM D257	1×10^{16}
Arc resistance	s	ASTM D495	92
Tracking resistance (CTI)		ADTM D3638	250
Flammability		UL94	V-0
The yellow card File No.			E213445
Appropriate List number of Ministerial Ordinance for Export Trade Control			Item 16 of Appendix -1

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