

Pocan[®] DP2004

PBT FR(40+30)

Injection Molding, Unreinforced, Flame Retardant (halogen free)

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	VALUE		
Melt volume–flow rate	55	cm ³ /10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	2.3	%	ISO 294–4
Molding shrinkage (parallel)	2.3	%	ISO 294–4
MECHANICAL PROPERTIES			
	VALUE		
Tensile modulus	2300	MPa	ISO 527–1/–2
Yield stress	55	MPa	ISO 527–1/–2
Yield strain	8	%	ISO 527–1/–2
Nominal strain at break	10	%	ISO 527–1/–2
Flexural modulus	2100	MPa	ISO 178
Flexural strength	75	MPa	ISO 178
Flexural strain at flexural strength	6.5	%	ISO 178–A
Charpy impact strength (+23°C)	75	kJ/m ²	ISO 179/1eU
Izod impact strength (+23°C)	65	kJ/m ²	ISO 180/1U
THERMAL PROPERTIES			
	VALUE		
Melting temperature (10°C/min)	224	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	75	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	160	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	1.2	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1.2	E–4/°C	ISO 11359–1/–2

Property Data

Pocan[®] DP2004

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Burning Behav. at 0.75 mm nom. thickn.	V-2	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
Burning Behav. at 1.5 mm nom. thickn.	V-2	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-2	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
Oxygen index	28	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.4	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	0.75	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	800	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.75	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	800	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	1.5	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	800	°C	IEC 60695-2-13
GWIT (Thickness (3) tested)	3	mm	IEC 60695-2-13

ELECTRICAL PROPERTIES

VALUE

Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	600	V	IEC 60112
Comparative tracking index (PLC)	0	class	UL 746A

OTHER PROPERTIES

VALUE

Density	1320	kg/m ³	ISO 1183
---------	------	-------------------	----------

PROCESSING RECOMMENDATIONS

VALUE

Property Data

Pocan[®] DP2004

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Drying temperature circulating air dryer	120	°C	
Drying time circulating air dryer	4–8	h	
Residual moisture content	0.00–0.02	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	250–265	°C	
Mold temperature	70–90	°C	
admissible residence time at Tmax	<5	min	

Viscosity–shear rate

