

Pocan[®] AF4120

(PBT+ASA)–I–GF20 FR(17)

20% Glass Reinforced, Injection Molding, Flame Retardant, Low Warpage

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	VALUE		
Melt volume–flow rate	40	cm ³ /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	5	kg	ISO 1133
Molding shrinkage (normal)	0.7	%	ISO 294–4
Molding shrinkage (parallel)	0.4	%	ISO 294–4
MECHANICAL PROPERTIES			
	VALUE		
Tensile modulus	7400	MPa	ISO 527–1/–2
Stress at break	105	MPa	ISO 527–1/–2
Strain at break	2.4	%	ISO 527–1/–2
Flexural modulus	7400	MPa	ISO 178
Flexural strength	155	MPa	ISO 178
Flexural strain at flexural strength	2.6	%	ISO 178–A
Charpy impact strength (+23°C)	40	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	35	kJ/m ²	ISO 179/1eU
Izod impact strength (+23°C)	35	kJ/m ²	ISO 180/1U
THERMAL PROPERTIES			
	VALUE		
Melting temperature (10°C/min)	225	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	170	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	209	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.3	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1	E–4/°C	ISO 11359–1/–2

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Burning Behav. at 0.75 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-0	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	900	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.4	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	825	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	0.75	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	725	°C	IEC 60695-2-13
GWIT (Thickness (3) tested)	1.5	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	750	°C	IEC 60695-2-13
GWIT (Thickness (4) tested)	3	mm	IEC 60695-2-13
<i>ELECTRICAL PROPERTIES</i>	<i>VALUE</i>		
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	35	kV/mm	IEC 60243-1
Comparative tracking index	200	V	IEC 60112
Comparative tracking index (PLC)	2	class	UL 746A
<i>OTHER PROPERTIES</i>	<i>VALUE</i>		
Density	1520	kg/m ³	ISO 1183

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<i>PROCESSING RECOMMENDATIONS</i>			
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)	240–260	°C	
Mold temperature	80–100	°C	