

Pocan[®] B4225

PBT–GF20 FR(17)

20% Glass Fiber Reinforced, Injection Molding, Flame Retardant

Print Date: 2025–10–04

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	VALUE		
Melt volume–flow rate	18	cm ³ /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	1.2	%	ISO 294–4
Molding shrinkage (parallel)	0.5	%	ISO 294–4
MECHANICAL PROPERTIES	VALUE		
Tensile modulus	7500	MPa	ISO 527–1/–2
Stress at break	125	MPa	ISO 527–1/–2
Strain at break	2.8	%	ISO 527–1/–2
Flexural modulus	7200	MPa	ISO 178
Flexural strength	185	MPa	ISO 178
Flexural strain at flexural strength	3.2	%	ISO 178–A
Charpy impact strength (+23°C)	45	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	40	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	6	kJ/m ²	ISO 179/1eA
Izod impact strength (+23°C)	40	kJ/m ²	ISO 180/1U
Izod impact strength (–30°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)	200	°C	ISO 75–1/–2

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied. Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect. Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values. Copyright © Envalior 2025. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.

Pocan[®] B4225

Print Date: 2025-10-04

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Temp. of deflection under load (0.45 MPa)	220	°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
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	32	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.5	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	700	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.75	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	700	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	1.5	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	700	°C	IEC 60695-2-13
GWIT (Thickness (3) tested)	3	mm	IEC 60695-2-13

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	3.8	—	IEC 62631-2-1
Relative permittivity (1 MHz)	3.6	—	IEC 62631-2-1
Dissipation factor (100 Hz)	40	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	180	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	29	kV/mm	IEC 60243-1
Comparative tracking index (PLC)	3	class	UL 746A

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.
Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.
Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.
Copyright © Envalor 2025. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalor.

Pocan[®] B4225

Print Date: 2025–10–04

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
OTHER PROPERTIES	VALUE		
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.1	%	Sim. to ISO 62
Density	1570	kg/m³	ISO 1183
PROCESSING RECOMMENDATIONS	VALUE		
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	

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.
Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.
Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.
Copyright © Envalior 2025. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.