

Akulon[®] F223–D B–MB

PA6

Low/Medium Viscosity, General purpose, Injection Molding, Food Contact Quality

Print Date: 2025–08–21

Sustainability

Bio-based
Mass balanced

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	1.1 / *	%	ISO 294–4
Molding shrinkage (normal)	1.1 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	3200 / 1000	MPa	ISO 527–1/–2
Nominal strain at break	20 / >50	%	ISO 527–1/–2
Yield stress	87 / 45	MPa	ISO 527–1/–2
Yield strain	4 / 25	%	ISO 527–1/–2
Flexural modulus	2850 / 900	MPa	ISO 178
Flexural strength	120 / 35	MPa	ISO 178
Charpy impact strength (+23°C)	N / N	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	N / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	4.5 / 35	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	2.5 / 5	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	60 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	150 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.9 / *	E–4/°C	ISO 11359–1/–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.

Akulon® F223–D B–MB

Print Date: 2025–08–21

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Coeff. of linear therm. expansion (normal)	0.9 / *	E–4/°C	ISO 11359–1/–2
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	26 / *	%	ISO 4589–1/–2
Glow Wire Flammability Index GWFI	900 / –	°C	IEC 60695–2–12
GWFI (Thickness (1) tested)	1.5 / –	mm	IEC 60695–2–12
Glow Wire Flammability Index GWFI	875 / –	°C	IEC 60695–2–12
GWFI (Thickness (2) tested)	0.75 / –	mm	IEC 60695–2–12
Glow Wire Ignition Temperature GWIT	825 / –	°C	IEC 60695–2–13
GWIT (Thickness (1) tested)	1.5 / –	mm	IEC 60695–2–13
Glow Wire Ignition Temperature GWIT	875 / –	°C	IEC 60695–2–13
GWIT (Thickness (2) tested)	1 / –	mm	IEC 60695–2–13

ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	3.2 / 14	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3 / 4.5	–	IEC 62631–2–1
Dissipation factor (100 Hz)	50 / 3000	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	150 / 1200	E–4	IEC 62631–2–1
Volume resistivity	1E13 / 1E10	Ohm*m	IEC 62631–3–1
Surface resistivity	– / 1E14	Ohm	IEC 62631–3–2
Electric strength	28 / 20	kV/mm	IEC 60243–1
Comparative tracking index	* / 600	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Water absorption	10 / *	%	Sim. to ISO 62
Humidity absorption	2.8 / *	%	Sim. to ISO 62
Density	1130 / –	kg/m³	ISO 1183

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.

Akulon® F223–D B–MB

Print Date: 2025–08–21

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
MATERIAL SPECIFIC PROPERTIES	DRY / COND		
Viscosity number	132 / *	cm³/g	ISO 307, 1157, 1628

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.