

Akulon[®] AKV50H2.0 DUS800

Akulon[®] S223–HG0

PA66–GF50

50% Glass Fiber Reinforced, Heat Stabilized

Print Date: 2026–04–09

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294–4
Molding shrinkage (normal)	1.2 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	16000 / 11500	MPa	ISO 527–1/–2
Stress at break	235 / 165	MPa	ISO 527–1/–2
Strain at break	2.7 / 3.9	%	ISO 527–1/–2
Flexural modulus	15500 / 11500	MPa	ISO 178
Flexural strength	355 / 275	MPa	ISO 178
Tensile modulus (200°C)	5200	MPa	ISO 527–1/–2
Stress at break (200°C)	75	MPa	ISO 527–1/–2
Strain at break (200°C)	5.9	%	ISO 527–1/–2
Charpy impact strength (+23°C)	95 / 95	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	100 / 100	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	16 / 21	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	14 / 14	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	15 / 20	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	260 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	253 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	260 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.2 / *	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 2026. 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.

Property Data

Akulon® AKV50H2.0 DUS800

Akulon® S223-HG0

Print Date: 2026-04-09

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Coeff. of linear therm. expansion (normal)	0.6 / *	E-4/°C	ISO 11359-1/-2
ELECTRICAL PROPERTIES		DRY / COND	
Relative permittivity (100Hz)	4.5 / 14	—	IEC 62631-2-1
Relative permittivity (1 MHz)	4 / 5	—	IEC 62631-2-1
Dissipation factor (100 Hz)	90 / 3200	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	150 / 850	E-4	IEC 62631-2-1
Volume resistivity	1E13 / 1E12	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
Electric strength	40 / 35	kV/mm	IEC 60243-1
OTHER PROPERTIES		DRY / COND	
Water absorption	4 / *	%	Sim. to ISO 62
Humidity absorption	1.2 / *	%	Sim. to ISO 62
Density	1570 / —	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 © Envalior 2026. 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.