

Stanyl[®] 46HF4530

PA46–GF30

30% Glass Fiber Reinforced, High Flow, Electro–friendly

Print Date: 2025–10–23

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES		DRY / COND	
Molding shrinkage [parallel]	0.5 / *	%	Sim. to ISO 294–4
Molding shrinkage [normal]	1.3 / *	%	Sim. to ISO 294–4
MECHANICAL PROPERTIES		DRY / COND	
Tensile modulus	10000 / 6000	MPa	ISO 527–1/–2
Tensile modulus (120°C)	5800 / –	MPa	ISO 527–1/–2
Tensile modulus (160°C)	5300	MPa	ISO 527–1/–2
Tensile modulus (180°C)	5000	MPa	ISO 527–1/–2
Tensile modulus (200°C)	4700	MPa	ISO 527–1/–2
Stress at break	180 / 120	MPa	ISO 527–1/–2
Stress at break (120°C)	115 / –	MPa	ISO 527–1/–2
Stress at break (160°C)	100	MPa	ISO 527–1/–2
Stress at break (180°C)	95	MPa	ISO 527–1/–2
Stress at break (200°C)	90	MPa	ISO 527–1/–2
Strain at break	2.5 / 5	%	ISO 527–1/–2
Strain at break (120°C)	5 / –	%	ISO 527–1/–2
Strain at break (160°C)	5	%	ISO 527–1/–2
Strain at break (180°C)	5	%	ISO 527–1/–2
Strain at break (200°C)	5	%	ISO 527–1/–2
Flexural modulus	9500 / 5500	MPa	ISO 178
Flexural modulus (120°C)	5100	MPa	ISO 178
Flexural modulus (160°C)	4900	MPa	ISO 178
Flexural strength	270 / 160	MPa	ISO 178

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.

Stanyl® 46HF4530

Print Date: 2025-10-23

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Flexural strength (120°C)	140	MPa	ISO 178
Flexural strength (160°C)	125	MPa	ISO 178
Charpy impact strength (+23°C)	60 / 90	kJ/m²	ISO 179/1eU
Charpy impact strength (−30°C)	60 / 60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 15	kJ/m²	ISO 179/1eA
Charpy notched impact strength (−30°C)	10 / 10	kJ/m²	ISO 179/1eA

THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	290 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	290 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.25	E-4/°C	ASTM D696
Coeff. of linear therm. expansion (normal)	0.6	E-4/°C	ASTM D696
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	—	—
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	—	—
Relative Temperature Index – electrical	65	°C	UL746B
RTI electrical (Thickness (1) tested)	0.75	mm	UL746B

ELECTRICAL PROPERTIES	DRY / COND		
Volume resistivity	1E13 / 1E9	Ohm*m	IEC 62631-3-1
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	550 / —	V	IEC 60112
Relative permittivity (100Hz)	4.4 / 12	—	IEC 62631-2-1
Relative permittivity (1 MHz)	4 / 4.6	—	IEC 62631-2-1
Relative permittivity (1GHz)	3.6 / —	—	IEC 61189-2-721

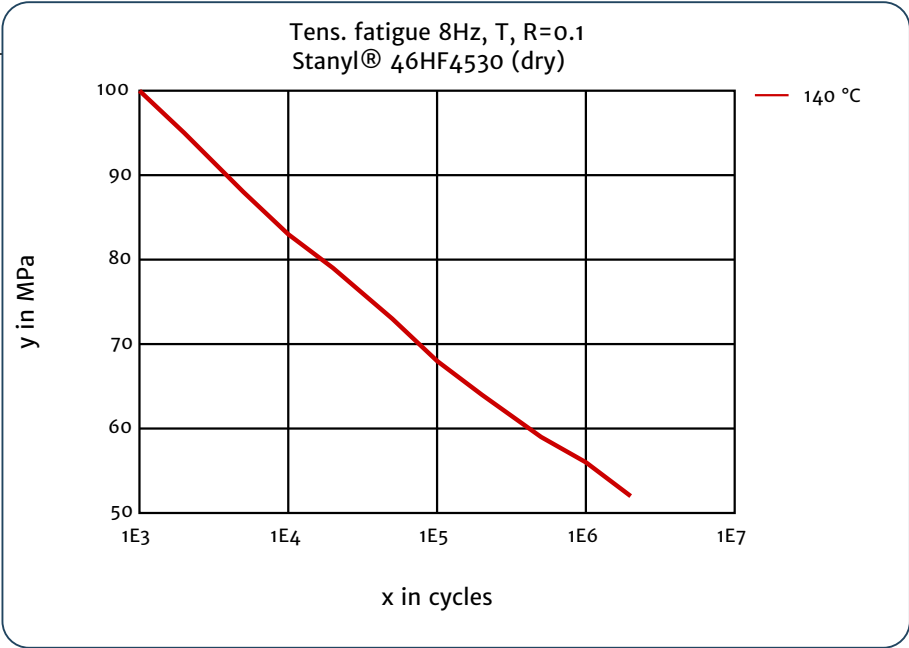
Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.
Seller is not responsible or liable for the design of the products 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.

Stanyl® 46HF4530

Print Date: 2025-10-23

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
OTHER PROPERTIES	DRY / COND		
Humidity absorption	2.5 / *	%	Sim. to ISO 62
Density	1410 / –	kg/m³	ISO 1183

Tens. fatigue 8Hz, T, R=0.1 ,
dry



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.