Property Data

Envalior
Imagine the Future

Stanyl® Diablo HDT2700 BK00001

PA46–GF40

40% Glass Reinforced, Heat Stabilized

Print Date: 2024–03–27

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.5 / *	%	ISO 294–4
Molding shrinkage (normal)	1 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	13500 / 7000	MPa	ISO 527–1/–2
Tensile modulus (120°C)	5400 / –	MPa	ISO 527–1/–2
Tensile modulus (160°C)	5000	MPa	ISO 527–1/–2
Tensile modulus (180°C)	4500	MPa	ISO 527–1/–2
Tensile modulus (200°C)	4000	MPa	ISO 527–1/–2
Stress at break	215 / 130	MPa	ISO 527–1/–2
Stress at break (120°C)	105 / –	MPa	ISO 527–1/–2
Stress at break (160°C)	85	MPa	ISO 527–1/–2
Stress at break (180°C)	75	MPa	ISO 527–1/–2
Stress at break (200°C)	60	MPa	ISO 527–1/–2
Strain at break	3 / 5.5	%	ISO 527–1/–2
Strain at break (120°C)	7 / –	%	ISO 527–1/–2
Strain at break (160°C)	8	%	ISO 527–1/–2
Strain at break (180°C)	8.5	%	ISO 527–1/–2
Strain at break (200°C)	9	%	ISO 527–1/–2
Flexural modulus	12000 / 7000	MPa	ISO 178
Flexural modulus (120°C)	5800	MPa	ISO 178
Flexural modulus (160°C)	5500	MPa	ISO 178
Flexural modulus (180°C)	5000	MPa	ISO 178

All the trademarks mentioned here are trademarks of Envalior.
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 2024. 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

Stanyl® Diablo HDT2700 BK00001

Print Date: 2024–03–27

PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
Flexural modulus (200°C)	4500	MPa	ISO 178
Flexural strength	330 / 170	MPa	ISO 178
Flexural strength (120°C)	135	MPa	ISO 178
Flexural strength (160°C)	125	MPa	ISO 178
Flexural strength (180°C)	100	MPa	ISO 178
Flexural strength (200°C)	85	MPa	ISO 178
Charpy impact strength (+23°C)	80 / 90	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	65 / 75	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13 / 20	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	12 / 12	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	14 / 22	kJ/m²	ISO 180/1A

THERMAL PROPERTIES	*DRY / COND*		
Melting temperature (10°C/min)	285 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	263 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	275 / *	°C	ISO 75–1/–2

OTHER PROPERTIES	*DRY / COND*		
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1480 / –	kg/m³	ISO 1183

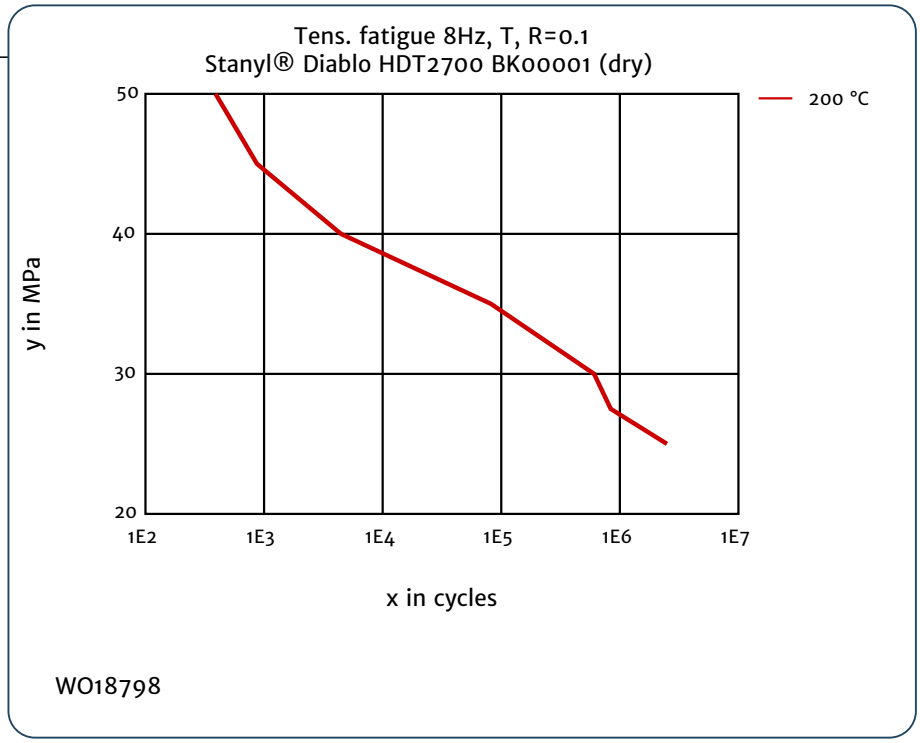
All the trademarks mentioned here are trademarks of Envalior.
Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.
Seller 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 2024. 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

Stanyl® Diablo HDT2700 BK00001

Print Date: 2024-03-27

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



All the trademarks mentioned here are trademarks of Envalior.
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 2024. 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.