

Tepex® dynalite 108–FG290(x)/45%

Print Date: 2025-08-21

Tepex® dynalite 108-FG290(x)/45%

Filament Glass – TPU consolidated composite laminate



The datasheet is valid for this specific composition only, the characteristics of composites depend on reinforcement level and fiber orientation. Non-standard thickness may alter some or all of these properties. The data listed here are given as average product properties and should not be used to establish specification limits nor used alone as basis of design. The underlying tests were conducted at room temperature and (where possible) with 2 mm specimen thickness. For tensile and flexural tests a specimen width of 25 mm was used and is highly recommended to achieve representative results.

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
LAYUP	VALUE		
Fiber	E-Glass 204 tex		
Weaving style	Twill 2/2		DIN ISO 9354
Area weight (dry fabric)	290	g/m²	DIN EN 12127
Weight rate (0°/90°)	50/50	%/%	
Polymer	Thermoplastic Polyurethane (TPU)		
Fiber volume content	45	vol%	nominal
Thickness per layer	0.25	mm	nominal
MECHANICAL PROPERTIES	DRY / COND		
Tensile Modulus	23 / –	GPa	ISO 527-4/5
Tensile Strength	440 / –	MPa	ISO 527-4/5
Elongation at Break	2.3 / –	%	ISO 527-4/5
Flexural Modulus	21 / -	GPa	ISO 14125

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.

Tepex[®] dynalite 108–FG290(x)/45%

Print Date: 2025-08-21

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
THERMAL PROPERTIES	DRY / COND		
Density	1820 / -	kg/m³	ISO 1183
Glass transition temperature (10°C/min)	94 / *	°C	ISO 11357-1/-2
Heat deflection temperature (0.1% flex. Modulus)	92	°C	ISO 75-1/3
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	3/*	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
CLTE -35°C to 23°C (0°)	12.1	E-6/°C	ISO 11359-1/-2
CLTE 23°C to 80°C (0°)	13.7	E-6/°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

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.