

## Bond Laminates TEPEX® dynalite 108-FGAL290(1)-FG290(x)/45% Filament Glass – TPU Consolidated Composite Laminate

Category : Polymer , Thermoplastic , Polyurethane, TP , Thermoplastic Polyurethane (TPUR), Glass Fiber Reinforced

### Material Notes:

Within the TEPEX® composite laminate, TPU distinguishes itself from alternative resin systems by its specific physical properties. The TPU resin is tough which results in an excellent impact and easy to mold, obtaining an excellent surface quality. The TPU-glass laminates can easily be bonded with common adhesive systems. An excellent adhesion is achieved when over molding with injection molding TPU grades. Typical application environments are sporting goods applications, helmet shells, cosmetic applications, footwear. Information provided by Bond Laminates, GmbH.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Bond-Laminates-TEPEX-dynalite-108-FGAL2901-FG290x45-Filament-Glass-TPU-Consolidated-Composite-Laminate.php](http://www.lookpolymers.com/polymer_Bond-Laminates-TEPEX-dynalite-108-FGAL2901-FG290x45-Filament-Glass-TPU-Consolidated-Composite-Laminate.php)

Physical Properties	Metric	English	Comments
Density	1.82 g/cc	0.0658 lb/in <sup>3</sup>	
Filler Content	45 %	45 %	by volume

Mechanical Properties	Metric	English	Comments
Tensile Strength	405 MPa	58700 psi	transverse; ISO 527-4/5
	430 MPa	62400 psi	longitudinal; ISO 527-4/5
Elongation at Break	2.9 %	2.9 %	longitudinal; ISO 527-4/5
	2.9 %	2.9 %	transverse; ISO 527-4/5
Tensile Modulus	23.5 GPa	3410 ksi	transverse; ISO 527-4/5
	25.0 GPa	3630 ksi	longitudinal; ISO 527-4/5
Flexural Strength	550 MPa	79800 psi	transverse; ISO 178
	585 MPa	84800 psi	longitudinal; ISO 178
Flexural Modulus	21.0 GPa	3050 ksi	transverse; ISO 178
	21.5 GPa	3120 ksi	longitudinal; ISO 178

Thermal Properties	Metric	English	Comments
Melting Point	190 °C	374 °F	DSC 3146
Maximum Service Temperature, Air	90.0 °C	194 °F	Relative Temperature Index; IEC 216/1
	@Time 7.20e+7 sec	@Time 20000 hour	

Thermal Properties	Metric	English	Comments
Minimum Service Temperature, Air	-30.0 °C	-22.0 °F	

Processing Properties	Metric	English	Comments
Processing Temperature	210 - 230 °C	410 - 446 °F	

Descriptive Properties	Value	Comments
Reinforcement	Area weight	290 g/m <sup>2</sup>
	Fabric	twill 2/2
	Fibers	filament glass (outer fibers coated with aluminum)
	Weight Rate	50% longitudinal and transverse
	Yarn	3x68 tex longitudinal and transverse

## Contact Songhan Plastic Technology Co.,Ltd.

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