

Bond Laminates TEPEX® dynalite 201-C200(x)/45% Carbon – PA6.6 Consolidated Composite Laminate

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 50% Carbon Fiber Filled

Material Notes:

Within the TEPEX® composite laminate, Polyamide 66 is a resin known for its high hardness, stiffness, abrasion resistance, heat and chemical resistances. The carbon used within this material is aerospace qualified. This material has outstanding mechanical properties and fatigue resistance. Typical application environments are structural sporting goods applications, helmet shells. Information provided by Bond Laminates, GmbH.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Bond-Laminates-TEPEX-dynalite-201-C200x45-Carbon-PA66-Consolidated-Composite-Laminate.php

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in ³	
Filler Content	45 %	45 %	by volume
Thickness	250 microns	9.84 mil	laminate layer thickness

Mechanical Properties	Metric	English	Comments
Tensile Strength	725 MPa	105000 psi	transverse; ISO 527-4/5
	785 MPa	114000 psi	longitudinal; ISO 527-4/5
Elongation at Break	2.1 %	2.1 %	longitudinal; ISO 527-4/5
	2.1 %	2.1 %	transverse; ISO 527-4/5
Tensile Modulus	51.0 GPa	7400 ksi	transverse; ISO 527-4/5
	53.0 GPa	7690 ksi	longitudinal; ISO 527-4/5
Flexural Strength	730 MPa	106000 psi	transverse; ISO 178
	760 MPa	110000 psi	longitudinal; ISO 178
Flexural Modulus	44.1 GPa	6400 ksi	transverse; ISO 178
	45.5 GPa	6600 ksi	longitudinal; ISO 178
Poissons Ratio	0.070	0.070	longitudinal; ISO 527-4/5
	0.070	0.070	transverse; ISO 527-4/5
Charpy Impact Unnotched	11.0 J/cm ²	52.3 ft-lb/in ²	longitudinal; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	Metric	English	Comments
	15.0 J/cm ²	71.4 ft-lb/in ²	Longitudinal; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Thermal Properties	Metric	English	Comments
Melting Point	260 °C	500 °F	DSC 3146
Maximum Service Temperature, Air	130 °C @Time 7.20e+7 sec	266 °F @Time 20000 hour	Relative Temperature Index; IEC 216/1
Deflection Temperature at 1.8 MPa (264 psi)	255 °C	491 °F	ISO 75-1/2
Minimum Service Temperature, Air	-30.0 °C	-22.0 °F	
Glass Transition Temp, Tg	70.0 °C	158 °F	DSC 3146

Processing Properties	Metric	English	Comments
Processing Temperature	280 - 300 °C	536 - 572 °F	

Descriptive Properties	Value	Comments
Reinforcement	Area weight	200 g/m ²
	Fabric	twill 2/2
	Fibers	carbon
	Weight Rate	50% longitudinal and transverse
	Yarn	3000 tex longitudinal and transverse

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China