BIOMID®

. 100% HIGHLY CRISTALLINE CELLULOSE FIBER
. Made of Lumber Industry by-products
. Obtained by mechanical process(unlike Viscose rayon which is obtained by chemical reaction)

. BIOMID® is a 11µ filament diameter , 183 Tex roving Bobbins of 1 / 3 / 4.5 kgs

Main Features of BIOMID®Fiber

. Almost half the weight of glass fiber, on-par in density with Aramid fiber
. Stable to 360°C, or about double most thermoplastics and native natural fibers
. Specific properties of BIOMID® laminates are often higher than those made of glass fiber
. Much less abrasive than glass fiber
. Translucent and Odourless (not opaque like traditional natural fibers)
. Volume of 183 Tex BIOMID® is similar to 3K Carbon fiber
1420 denier Aramid fiber
940 denier HMPP fiber
300 Tex e-glass roving

Comparison of BIOMID® Fiber with Glass and Bast Fibers

Property	Glass Fiber	BIOMID®	Traditional Natural Fibers	Comments
Light weight	2.54	1.5	1.5	Almost Half the weight
Renewable	No	Yes	Yes	Glass is a mineral fiber
Abrasive	Yes	No	No	Better worker comfort
Biodegradable	No	Yes	Yes	End of service life disposal
Uniform Properties	Yes	Yes	No	Uniform fiber = Uniform properties
Continuous	Yes	Yes	No	Better Load transfer
Thermal decomposition T°	High	High	Low	Permits use with higher melting point / curing resins
Laminate	Translucent	Translucent	Opaque	Familiar appearance

LAMINATE PROPERTIES

***Construction**: Plain weave fabrics, 11 layers, 3mm thickness*

***Resin system**: VE resin, Press moulded, 50% resin content, post cured*

Fiber	Tensile Strength ASTM D638	Flexural Strength ASTM D790	Flexural Modulus ASTM D790	Density
Reference: Common **FLAX**	86 MPa	136 MPa	7.3 GPa	1.22
100 % **BioMid®**	**144 Mpa**	**237 MPa**	**9.6 GPa**	**1.23**
50% BioMid®/ 50% E-glass	243 MPa	398 MPa	16.6 GPa	1.49

*Results can vary with different constructions, resins, curing conditions, etc…

Cost: ***BIOMID® /GLASS*** **<** ***BIOMID®*** **<** ***FLAX***