

F01-15A, Feng Lin Lv Zhou, Datun Road, ChaoYang District, Beijing, P.R China Http:// www.bambrotex.com TEL: 86-10-64867890 FAX: 86-10-64844812

Bamboo fiber from Bambrotex

> Material for bamboo fiber

The material of bamboo fiber is from bamboo which is harvested from wild farm. And the bamboo is not used any chemical weeding, insecticides, fungicide in it growing. Bamboo is not irrigation. Bamboo grows in a nature environment and no polluted. We harvest about 2 year's old bamboo.

> Bamboo fiber production line

Our products is made of 100% bamboo, the green bamboos are used to produce natural and eco-friendly fiber without any chemical additive.

Bamboo fiber is a regenerative cellulose fiber. It is a natural, green, environmental protection raw material for spinning and it is outstanding in intension, spinnability. Process of production

Bamboo---Cutting material---washing material---Braizing---Bleaching---Smashing---Etiolating---Filtrating---Filaturing---Binding---Cutting Fiber---Drying---Packing

During the process of hydrolysis-alkalization & multiphase bleaching, no harmful chemicals are used.

> Bamboo fiber property

 \diamond Outstanding in moisture absorption and releasing, breathable

Cross section of the bamboo fiber



Because the cross-section of the bamboo fiber is filled with various micro-gaps and micro-holes, it has much better moisture absorption and ventilation. With this unparalleled micro-structure, bamboo fiber apparel can absorb and evaporate humans sweat in a split second.

- ♦ Natural antibacterial and bacteriostatic, deodorization and ultraviolet-proof
- ♦ Fine spinnability, dyeing color pure and bright
- ♦ Fell soft, close-fitting, ourtstanding indrapability
- ♦ These bamboo fiber characteristics have been attested by some international organizes such as OEKO.



> Physical Parameters Compared With Other Fibers

	Bamboo fiber	Viscose fiber	Cotton fiber
Linear density (dtex)	1.67	1.67	1.5~1.7
Single dry tensile strength (cN/dtex)	2.2~2.5	2.5~3.1	2.5~3.1
Single wet tensile strength (cN/dtex)	1.3~1.7	1.4~2.0	1.5~2.1
Dry tensile elongation percentage	14~18	18~22	8~10
%			
Moisture regain %	13	13	8.5
Absorbency rates %	90~120	90~110	45~60
Specific density (g/cm3)	1.32	1.32	1.5~1.6
Double length (mg/100g)	1.2	1.2	/
Mass specific resistance / Ω .g. cm ⁻²	1.09x10 ⁸	2.29x10 ⁷	10 ⁸

> The specification of bamboo fiber

For bamboo fiber our current type are1.56dtexx38mm and 1.33dtexx38mm.

Testing condition:	Temperature : 20°C	Relative humidity: 65%
ltem		Reference data
Dry tensile strength (cN/tex)		2.30
Wet tensile strength (cN/tex)		1.31
Dry elongation at break (%)		23.2
Linear density percentage of deviation (%)		-1.91
Percentage of length deviation (%)		-2.01
Over length staple fiber (%)		0.50
Over cut fiber(mg/100g)		3.30
Residual sulfur(mg/100g)		11.2
Defect(mg/100g)		3.00
Oil-stained fiber(mg/100g)		0
Coefficient of dry tenacity variation (CV) (%)		13.77
Whiteness (%)		67.60
Oil content (%)		0.21
Moisture regain (%)		13.38
Rate		Grade A

For 1.33dtexx38mm bamboo fiber (for reference)

For 1.56dtexx38mm bamboo fiber (for reference)

Testing condition:	Temperature : 20°C	Relative humidity: 65%
Item		Reference data
Dry tensile strength (cN/tex)		2.28
Wet tensile strength (cN/tex)		1.32
Dry elongation at break (%)		23.8
Linear density percentage of deviation (%)		-1.80
Percentage of length deviation (%)		-1.80
Over length staple fiber (%)		0.50
Over cut fiber(mg/100g)		3.60
Residual sulfur(mg/100g)		11.2
Defect(mg/100g)		3.20
Oil-stained fiber(mg/100g)		0
Coefficient of dry tenacity variation (CV)(%)		13.07
Whiteness (%)		67.20
Oil content (%)		0.20
Moisture regain (%)		13.03
Rate		Grade A

The 1.56dtexx38mm and 1.33dtexx38mm bamboo fiber is bright staple fiber from China Bambrotex.