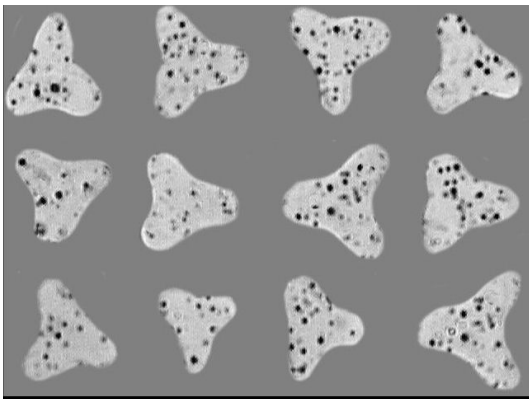
PRELIMINARY DATASHEET

FiberVisions®

Fibers for Hygiene

FiberVisions® Trilobal Fibers for Carded Thermal Bonding



Polypropylene staple fibers for new nonwoven products

FiberVisions has developed cost effective trilobal staple fibers as a response to the continuous need to make fabrics more versatile without sacrificing strength and barrier properties.

FiberVisions trilobal staple fibers allow customers to make nonwoven fabrics with dramatically improved coverage and uniformity while maintaining equivalent fabric strength and softness. Additionally, these fibers can be supplied in both a standard and a high opacity version.

Furthermore, these trilobal fibers are optimized for dry laid nonwoven formation systems and are specifically designed to be converted into carded thermal bonded (CTB) fabrics.

Fiber diameter, cut length, crimp and lubrication are tailored to the needs of the application and of the customer to assure excellent processability and product quality.

What can PP trilobal fibers add to your product?

FiberVisions trilobal fibers are made from polypropylene using a new technology and have a number of remarkable characteristics:

- ❑ Developed for dry laid CTB formation systems
- ❑ Improved coverage even in lightweight fabrics
- ❑ Engineered to provide high fiber tensile strength
- ❑ Improved loft and hand
- ❑ Basic PP fiber qualities:
  - low density (0.91 g/cm³)
  - resistance to alkalis, acids, and most organic chemicals
  - very low moisture absorption

Higher Opacity

The significance of the trilobal fibers is evident when comparing the opacity of CTB fabrics (18 g/m²) produced from these fibers:

Fabric Composition	Opacity (%)
Round PP	19
Trilobal PP (std. opacity)	33
Trilobal PP (high opacity)	41

The increased surface area of the fibers results in higher light scattering and therefore, higher opacity.

Maintain fabric strength

The inclusion of trilobal fibers provides equal fabric strength when compared the cross-directional strength of CTB fabrics (18 g/m²) produced from these fibers:

Fabric Composition	CD Strength (N/5 cm)
Round PP	8.7
Trilobal PP	8.7

Performance profile of polypropylene fibers

FiberVisions fibers have a number of advantages over other man-made fiber types:

Density. The density of polypropylene is 50% lower than polyester and 25% lower than polyamide. This means that lightweight fabrics can be made with excellent bulk and cover from lower denier yarns than from other fiber types.

Comfortable. Polypropylene is a very comfortable and soft fiber. It has a low modulus which ensures good drapeability, and it has excellent resistance to static build-up.

Insulation. Polypropylene has the lowest conductivity of all textile fibers, and it absorbs no moisture.

Resistance. Polypropylene is inert to acids, alkalis and other chemicals. It is resistant to rot, mildew and bacteria. Polypropylene fiber is highly resistant to abrasion and has a toughness superior to most fibers.

Technical Service. FiberVisions believes in offering extensive technical service to its customers. This includes fiber innovation programs, exclusive fiber development, color matching, and fiber quality enhancements.

Request a trial for your next application!

See Overleaf ➔

Typical Properties

FiberVisions® Trilobal Fibers for Carded Thermal Bonding

	Nom. Value	Property	Reference
9 km	1.5	Titer (denier per filament)	ASTM D1577
	2.6	Tenacity (g/denier)	ASTM D3822
	130%	Elongation at break	ASTM D3822
	38, 48	Fiber length (mm)	ASTM 5332
	100% PP 140 - 150°C 162 °C	Raw material Softening point Melting point	As described in ASTM D276
10 cm	Adjustable	Crimp Frequency	ASTM D3937
	Adjustable	Finish level as weight %	Internal FV test

**All measurements are conducted under standard atmosphere according to ISO 554 (23°C/50% relative humidity).*

Polyolefin fibers consist of 99% carbon and hydrogen. The remaining 1% consists of water and applied spin finish. The fiber bales are protected with polyolefin foil and closed with polyester straps. The product and the packaging materials are suitable for recycling and combustion. Inhouse waste should be kept clean to facilitate direct recycling. In disposal of any waste, ensure that all applicable regulations are met.

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FiberVisions
3700 Crestwood Parkway, Suite 900
Duluth, Georgia 30096
Tel.: +1 678 578 7240
Fax: +1 678 578 7276
email: sales.hygiene@fibervisions.com

FiberVisions a/s
Engdraget 22
DK-6800 Varde, Denmark
Tel.: +45 7994 2200
Fax: +45 7994 2201
e-mail: fibervisions@fibervisions.dk

FiberVisions Textile Products, Ltd.
No. 29 Heng Shan Road
Suzhou, China 215009
Tel.: +86 512 6823 1099
Fax: +86 512 6823 0021
email: sales.suzhou@fibervisions.com

www.fibervisions.com