# **D**ATASHEET



Fibers for Textiles

# FiberVisions® T-108 CoolVisions® Dark Dyeable Polypropylene Fiber - for ring spinning

CoolVisions® Dark dyeable polypropylene fiber is a disperse dyeable polypropylene for use in the textile industry.

The advantage of CoolVisions® Dark T-108 staple fibers is the ability to achieve dark shades while adding 30% less dye.

CoolVisions® Dark T-108 staple fibers are engineered for use in ring spinning applications.

CoolVisions® Dark fibers offer the following advantages when used in textile applications:

- It has essentially the same properties as solution dyed polypropylene fibers with the added flexibility for design and fashion driven markets because it is dyeable using disperse dyes.
- AATCC 61-2A wash fastness can be achieved through the proper selection of dyes.
- It has a soft cottony hand, more so than solution dyed staple.
- It can be blended with wool, cotton, cellolusics or synthetic fibers.
- It can produce garments that are lightweight, comfortable, and breathable with excellent moisture management properties.



## **Dyeing and Finishing**

Dyeing should be done using high energy disperse dyes at a temperature no higher than 130 °C (120 °C preferred) for 45 minutes. Maximum finishing temperature is 140 °C (130 - 135 °C preferred). Recommendations for dyeing and finishing are provided in the Dyeing Guideline.

#### **Applications**

CoolVisions® Dark is the industry's premier disperse dyeable polypropylene fiber which was created to address the needs of the manufacturer and the desires of the consumer.

CoolVisions® Dark dyeable polypropylene fibers are used in textile applications where the properties of polypropylene are desired, but fashion colors are a consideration.

The inherent stain resistance, thermal insulation and moisture management properties, in addition to it's durability, make CoolVisions® perfect for a wide range of applications.

CoolVisions® Dark fiber is suitable for any lifestyle as it is "easy care, easy wear".

# **Fiber Properties**

CoolVisions® Dark dyeable polypropylene T-108 fiber is a gray crimped fiber for ring spinning.

Typical fiber properties in the table overleaf are guidelines for the customer. Optimization of specific fiber properties is possible, giving the customers a chance to get a unique and exclusive fiber grade.

CoolVisions® is a registered trademark of FiberVisions, LP.

## **Product Delivery**

CoolVisions® Dark dyeable polypropylene T-108 staple for ring spinning is offered as a 1.5 dpf staple fiber. It is supplied in bales.

# Advantages of CoolVisions® polypropylene fibers

CoolVisions® fibers have all the great advantages of polypropylene fibers over other fibers:

Density. The density of polypropylene is 40% lower than polyester, roughly 55% lower than cotton, and 30% lower than wool. This means that lighter weight fabrics can be made with excellent bulk and cover than from other fiber types.

**Mechanical Properties.** The T-108 fiber has a toughness superior to most fibers which translates into more durable apparel products.

Colorfastness. When appropriate dyes are used, good AATCC 61-2A wash fastness (49°C) is achievable. Please refer to the dyeing guidelines for a list of approved dyes.

Comfortable. T-108 fiber for ring spinning applications produces soft yarns that result in fabrics with a soft hand and good drapeability. It also has excellent moisture transport properties to keep you cool when it is warm.

# **Typical Properties**



# FiberVisions® T-108 Fiber

	Nom. Value	Property	Reference
9 km	1.2 - 1.5	Titer (denier per filament)	ASTM D1577
\ / 	3.0 - 4.6	Tenacity (g/denier)	ASTM D3822
	25 - 60%	Elongation at break	ASTM D3822
	38, 62	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.

**Insulation.** Polypropylene has the lowest thermal conductivity of all textile fibers. CoolVisions® fibers will keep you warm when it is cold.

**Moisture regain.** CoolVisions® fiber does not absorb water. The hydrophilic/hydrophobic properties of fabrics made from T-108 fiber can be engineered for specific end uses with topical finishes.

**Resistance.** CoolVisions® is inert to acids, alkalis and other chemicals, including bleach. It is also resistant to rot, mildew and bacteria.

**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!





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