

# FiberVisions<sup>®</sup> HY-Care B

The FiberVisions<sup>®</sup> HY-Care B fiber is developed and manufactured to offer hydrophobic carded materials to the hygiene industry. The fibers in a carded nonwoven product resist the penetration of liquids and will direct the fluids to an absorbent area or elsewhere.

This HY-Care B fiber for carded, thermal-bonded coverstock fabrics has good hydrophobic properties and will be a perfect outer textile backsheet layer.

The use of FiberVisions<sup>®</sup> HY-Care B in nonwoven fabrics has a proven product performance regarding:

- Good nonwoven tenacities and liquid repellency characteristics
- Good cardability and a broad bonding window
- High carding speeds possible after optimization of the fiber to suit the machinery configuration
- The nonwoven fabrics have a superior softness and texture when compared to spunbonded materials
- The use of carded, thermal-bonded coverstock fabrics in leg cuffs and textile backsheet application ensures materials with high fabric uniformity without weak spots
- Fibers and nonwoven fabrics which can be laminated to film due to the broad bonding window

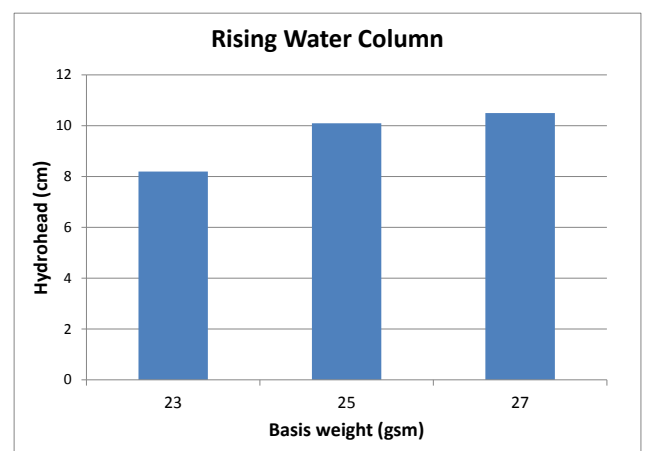
The consistent high quality and uniformity of the fibers ensure a good web uniformity, which enhances the hydrophobic properties of the nonwovens. Carded, thermal-bonded nonwoven fabrics do not have weak spots in the fabric which reduce the hydrophobicity, in contrast to spunbonded fabrics.

FiberVisions<sup>®</sup> HY-Care B fibers are available in 1.7 and 2.2 dtex. The fine fibers will increase the hydrophobicity of the nonwoven fabrics due to an decrease in pore size and the higher uniformity of the fabric.

# Hydrophobic Fibers for Backsheet Fabrics

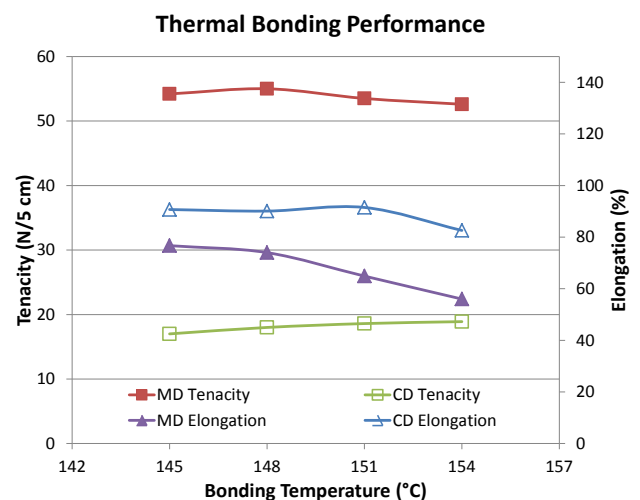
## Rising Water Column

The following nonwoven repellency values (Internal FiberVisions test method) are obtained from coverstock fabrics from HY-Care B fibers in 2.2 dtex: Normally, a 1.7 dtex fiber would result in a higher rising water column test result.



















## Nonwoven Properties

Typical thermal bonding curves from a 23 gsm nonwoven fabric produced at the FiberVisions a/s pilot carding line at a carding speed of 100 m/min:



# Typical Fiber and Nonwoven Properties

 <b>FiberVisions®</b> <b>HY-Care B</b>			
	Nom. Value	Property	Reference
	1.7 and 2.2 dtex	The weight in grams of a fiber of 10 km length	Internal FV test
	1.8-2.2 cN/dtex	Bursting strength of the fiber	Internal FV test
	320-370%	Elongation at break	Internal FV test
	40, 50 and 60 mm	Fiber length (under a prescribed load)	Internal FV test
	100% PP 140-150°C 162 °C	Raw material: Softening point Melting point	
	Variable	Crimp frequency (KD) no. of crimps/10 cm	Internal FV test
	0.20-0.35%	Finish level as weight %	Internal FV test

 <b>Typical data obtained from FiberVisions pilot thermal bonding line</b>			
	Nom. Value	Property	Reference
	All values refer to a 23 g/m <sup>2</sup> nonwoven, produced at optimum conditions at 100 m/min		
	30-32 N/5 cm	Bonding Index, combining MD and CD tensiles	Formula
	51-55 N/5 cm	MD Tensile Strength	Internal FV test
	16-19 N/5 cm	CD Tensile Strength	Internal FV test
	55-70%	MD Elongation	Internal FV test
	85-110%	CD Elongation	Internal FV test
	up to 8 cm	Water Repellency	Int. test method

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

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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