



**ES FIBERVISIONS**

## WL-Adhesion - Upgrade Wetlaid Products

ES FIBERVISIONS has long been committed to the paper and wetlaid nonwovens industries: We will provide advanced fibers which will improve the performance and application and develop or modify to meet the demands from our customers.

A fiber to serve this objective is the bicomponent WL-Adhesion fiber based on polypropylene and polyethylene.

The ES FIBERVISIONS WL-Adhesion fiber represents a breakthrough for manufacturers:

- The outer sheath of the fiber (the polyethylene) is enhanced and acts as a bonding media to other synthetic and natural fibers. The available bonding/process window is broad and makes it easier and uncomplicated to reach a good bonding and product strength of the wetlaid paper/nonwoven
- The polypropylene core of the bicomponent fiber ensures continued structure where the sheath is activated and gives outstanding "liquid performance":  
The nature of this synthetic fiber ensures that wet strength of the product remains intact during use, even at low dosages
- It reduces or eliminates the need for chemicals and chemical bonding adhesives and thus contribute to a healthier working environment.
- The famous "ES-softness".
- With a density of 1.15 g/cm<sup>3</sup> the dispersability of the fibers is easy and unproblematic. Special attention to fiber cutting and use of special lubricants positively add to the dispersability of the fiber.
- The fibers are delivered with an intend to give customer-made performance. In co-operation with our customer the fibers' dtex, opening degree and crimp level are designed to ensure the customer optimal production flow.

The wetlaid fabrics based on WL-Adhesion give good bonding and/or sealing values, because the polypropylene core remains intact after activation of the sheath and provides good bonding strength to the sealed part.



Very uniform dispersion of the fibers

WL-Adhesion has long been used in the wetlaid industry and has a FCM/Food Contact Material status - subject to auditing by proper authorities and has also achieved an ISEGA certificate.



### WL-Adhesion Fiber Properties (typical values)

Dtex:	2.2 - 6.7 dtex
Density:	1.155 g/cm <sup>3</sup>
Tensile strength:	1.0 - 3.5 cN/dtex
Elongation:	40-100%
Fiber length:	
- for wetlaid	3, 4, 6, 12 mm
Crimp frequency:	custom made
Spin finish:	0.3-0.5%
Melting point:	
• of polyethylene sheath	130°C
• of polypropylene	160°C

Polyolefin fibers consist of 99% carbon and hydrogen. The remaining 1% consist of water and applied spin finish.

Packing in bales:

The bales are protected with polyolefin foil and closed with polyester straps. The product and the packaging materials are suitable for recycling and combustion.

Packing in bags:

The product is packed in bags of polypropylene foil. Straps and handles are also polypropylene material. Inhouse waste should be kept clean to facilitate direct recycling. In disposal of any waste, be certain all applicable regulations are met.

For further information contact your ES FIBERVISIONS representative.

Further information:

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