EDC - Hollow Splittable Fibers

Now *ES FIBERVISIONS* brings new opportunities for spunlace, wetlaid and needlepunch producers.

EDC – hollow splittable fiber - has 16 segments in each fiber. This fiber can be splitted by mechanical impact, e.g. spunlace or needle-punching processes.

We are now commercially introducing the EDC 1.7 dtex fiber which consists of 16 elements, that after splitting will be approx. 0.1 dtex.

The fiber consists of polyethylene and polypropylene. Therefore this fiber shows excellent chemical stability even in strong alkaline solution where PET would be dissolved.

Conventionally, the PET/PA sea/ island fiber was popular to obtain the very fine fibers around 0.1dtex, but this type of fiber needs to be chemically treated with an alkaline solution and was not a cost effective solution compared to the EDC fiber.

From EDC fibers, fabrics with excellent drapability, softness and various functions can be obtained with conventional spunlacing or needlepunching processes.

The most popular application for EDC fiber is the spunlace process, as this fiber can be split at low water pressure and is also effective for energy saving.

The EDC fiber also shows high splittability in a needlepunching process, and this offers various applications and functions that have not been available with conventional needlepunched nonwovens.

EDC fiber is also available as a short cut fiber, and the fabrics will have the same functions as with those made of EDC fiber for carding application.

EDC Fiber Properties (typical values)

dtex:	1.7 - 5.6 dtex
Tensile strength:	3.0-4.0 cN/dtex
Elongation:	40-100%
Fiber length:	
- for wetlaid	5-15 mm
- for carding	38-72 mm
Crimp frequency:	50-80/10 cm
Spin finish:	0.3-0.5%
Melting point;	
- of polyethylene sheath	130° C
- of polypropylene core	162° C

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, be certain all applicable regulations are met.
For further information contact your ES FIBERVISIONS representative.

Figure:
Cross section of EDC fiber and the dimension of each component after fibrilation

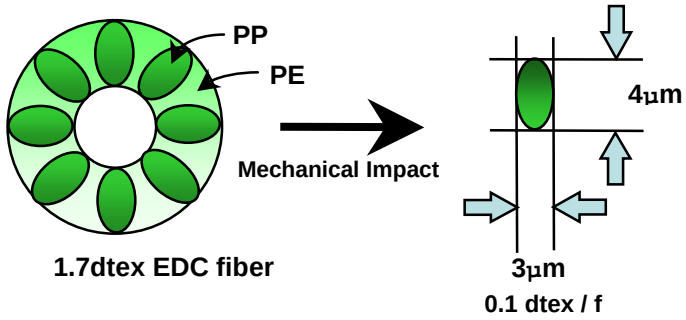
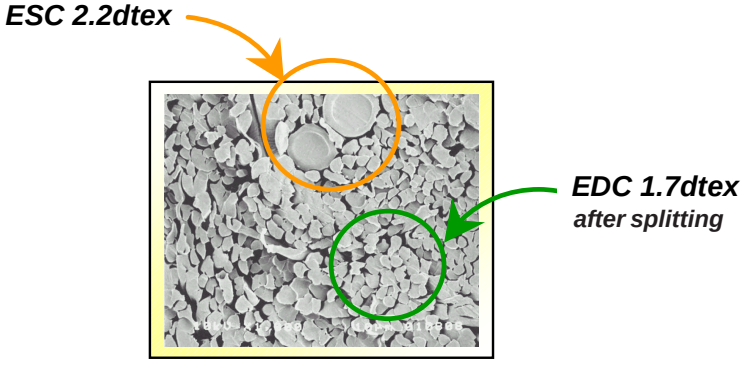


Figure: ***SEM Image of EDC fiber after fibrilation***



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