



ES-Lowmelt - Soft & Bulky at Low Temperature

The ES-Lowmelt fiber signals a breakthrough in nonwoven bonding possibilities:

The ES-Lowmelt from *ES FIBERVISIONS* allows nonwoven bonding to take place at temperatures below 100 °C .

ES-Lowmelt Fiber Features

The ES-Lowmelt fiber has the following characteristics:

- The polyethylene sheath material has a melting point of approx. 95 °C, which enables the fiber to bond at much lower temperatures than other bicomponent fibers.
- The low bonding temperature gives a broad bonding window (see Figure 1), which eases the processability with other fiber types or lamination to other materials (e.g. films).
- The fiber gives the nonwoven very high softness.
- The fiber is available in a range from 3.3 to 10 dtex.
- When air-through bonded the non-

Typical Properties

Fibers:

Dtex:	3.3 - 10 dtex
Tensile strength:	2.8-3.4 cN/dtex
Elongation:	80%
Fiber length:	40-60 mm
- in short cut	3-12 mm
Crimp frequency:	75-120
Crimp contraction:	9-11%
Spin finish level:	0.2-0.4%

Nonwovens*:

Ovenbonded NW:

Tenacity/MD:	40-50 N/5 cm
Tenacity/CD:	15-20 N/5 cm
Elongation/MD/CD:	20-40/45-65%

Calender bonded NW:

Tenacity/MD:	25-35 N/5 cm
Tenacity/CD:	5.2-6.5 N/5 cm
Elongation/MD/CD:	20-30/70-100%

woven obtains excellent bulkiness at low temperatures (Figure 2).

- It can be carded and thermally bonded (calender, air-through or ultrasonic or by means of steam).
- It is available in hydrophilic and hydrophobic versions.
- The fiber is also available in short cut versions for the airlaid industry: This version is called:

AL-Lowmelt,

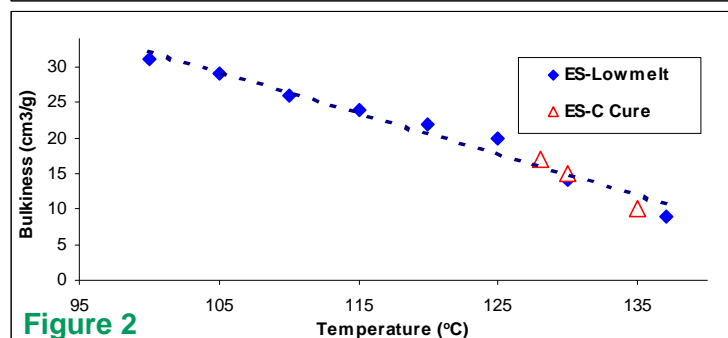
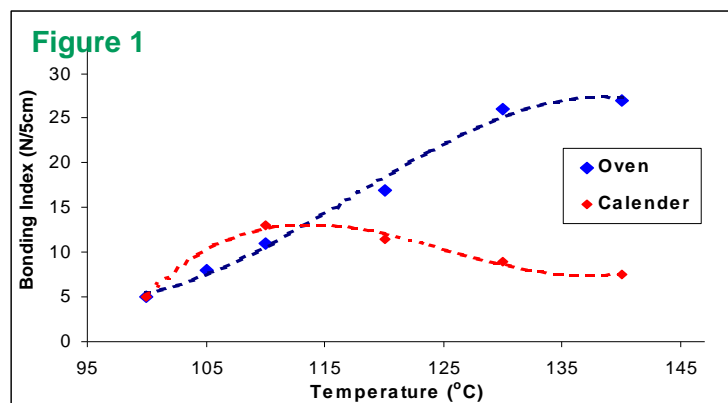
- and is available in 3, 4, 6, 12 mm

* Nonwoven properties are based on a 20 g/m² air-through-bonded fabric produced at FiberVisions Pilot Nonwoven line.

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.

Typical Nonwovens Bonding Window (and Bonding Index)



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