

ASPUN™ MB Meltblown Fiber Resins

Who doesn't want softer, better nonwovens?

Softer, more cloth-like nonwoven materials are critical to the development of absorbent hygiene products that combine more comfortable fit, outstanding performance and efficient processing.

So, obviously, everyone wants them.

In the past, however, increasing softness and comfort has typically reduced the strength, durability and processability of nonwovens.

ASPUN™ MB Meltblown Fiber Resins are helping change that.

This exclusive polyethylene (PE) technology produces softer, finer fibers than previously existing PE and polypropylene (PP) materials while maintaining strength, durability and processability. As a result, it's helping create a new generation of extremely soft, efficient nonwovens for:

- Composites such as SMS using bicomponent spunbonds
- Monocomponent meltblown fabrics

These exciting polymers are an ideal fit for absorbent hygiene products (AHP), face masks, medical drapes

Figure 1: Fiber size of selected monocomponent meltblown fabrics (50 gsm)^(1,2)

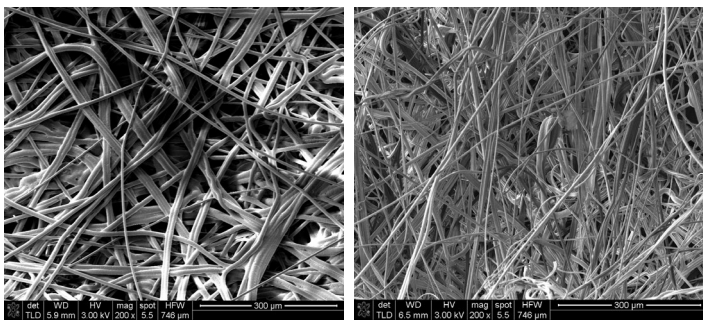
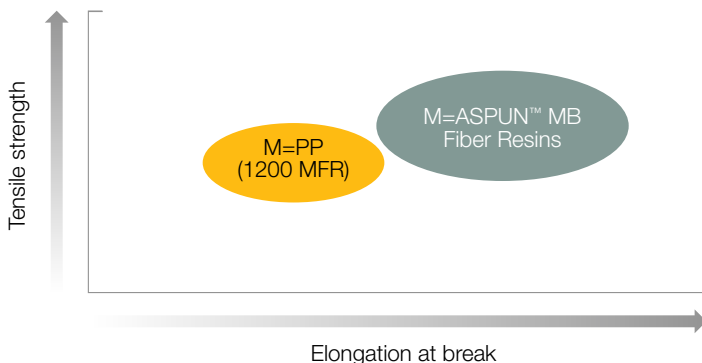


Figure 2: Typical tensile performance of selected SMS composites⁽¹⁾



⁽¹⁾ Typical values, not to be construed as specifications. Users should confirm results by their own tests. ⁽²⁾gsm = grams/m²

⁽³⁾ If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; (3) there is greater potential for Dow to change specifications and/or discontinue production; and (4) although Dow may from time to time provide samples of such products, Dow is not obligated to supply or otherwise commercialize such products for any use or application whatsoever.



and garments, wipes, sterilization packs, filtration and other hygiene and industrial applications where increased softness offers added value.

Exceptional performance⁽¹⁾

The "secret" behind ASPUN™ MB Resins is our proprietary INSITE™ Technology, which enables the lighter, thinner fibers (Figure 1) to offer:

- Increased comfort with significantly improved softness/ drapability compared to PP
- Improved bonding to PP/PE bico spunbonds
- Reduced noise/stiffness
- Improved coverage

Likewise, composite nonwovens made with ASPUN™ MB Resins – such as SMS with bicomponent spunbond – can enjoy improved strength and elongation for enhanced fit compared to composite nonwovens using PP meltblown (Figure 2).

And, with no need for additional process or additive technologies to achieve the desired melt index, ASPUN™ MB Resins can offer better odor control with improved sensory performance. They also have the potential to offer significantly better gamma sterilization resistance than PP.

Processing efficiency⁽¹⁾

ASPUN™ MB Resins offer the same high levels of processability Dow customers have come to expect from ASPUN™ Fiber Resins, plus:

- Comparable throughput rates with lower extruder and die pressures than PP
- The potential for lower production costs based on reduced air temperature, air flow rate and melt temperature

Better together

ASPUN™ MB Meltblown Fiber Resins and our deep understanding of material science help us team up with customers to develop custom tailored solutions for new and existing applications. And Pack Studios – our exclusive, global network of technical experts, equipment and testing capabilities – helps bring innovations to market faster and more cost efficiently.

We'd love to talk about your nonwovens challenges. Together, we can help produce more sustainable, circular solutions for the future. Please visit dow.com or contact your Dow representative to learn more.



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