



ASPUN™ 6000 Polyethylene Fiber Grade Resin for Nonwoven Fabrics

Main Characteristics

ASPUN™ 6000 Polyethylene Fiber Grade Resin is a new polyethylene resin complementing the ASPUN™ Fiber Grade Resin portfolio, produced on the proprietary solution process of The Dow Chemical Company. By introducing ASPUN™ 6000 Polyethylene Fiber Grade Resin, Dow is broadening its resins offering with a solution that helps customers meet key performance requirements in hygiene and medical applications. This innovative resin is designed for monocomponent and bicomponent spunbond applications and fulfills customers' demand for excellent cloth-like haptics, while also offering a fine balance of improved softness, comparable tensile strength, and significantly improving abrasion resistance for hygiene and nonwoven applications.

ASPUN™ 6000 Polyethylene Fiber Grade Resin has been designed in order to improve spinning performance as well as thermal bonding performance by optimizing the molecular design of the polymer including the thermal properties. The new resin has a melt flow index of 19 g/min and a density of 0.935 g/cm³ which provides an improved bonding window of the nonwovens web in the spunbond process. This ASPUN™ resin is using a new formulated stabilization package, designed for improved long term processability.

The resin offers excellent elongation properties, drape, and haptics combined with improved abrasion resistance when combined with other materials in bicomponent fibers. Used purely, the ASPUN™ 6000 Polyethylene Fiber Grade

Resin provides nonwovens with softness and drape in a class of its owns as well as improved abrasion resistance and a balanced profile of mechanical properties.

In addition, the resin complies with stringent industry standards in Europe and North America:

- European Commission Regulation (EU) No 10/2011
- U.S. FDA 21 CFR 177.1520(c)3.2a

Figure 1 clearly illustrates the improvement on the drapeability comparing monocomponent homopolymer (hPP) spunbond nonwoven versus bicomponent and monocomponent spunbond polyethylene.

Figure 2 demonstrates the improvement on the abrasion resistance of the new ASPUN™ 6000 Polyethylene Fiber Grade Resin versus standard ASPUN™ resins.

Figure 1: 20 Grams per Square Meter (GSM) Fabric (Handle-O-Meter)

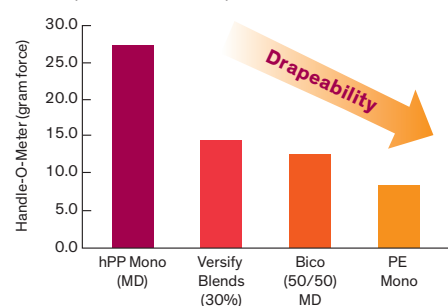
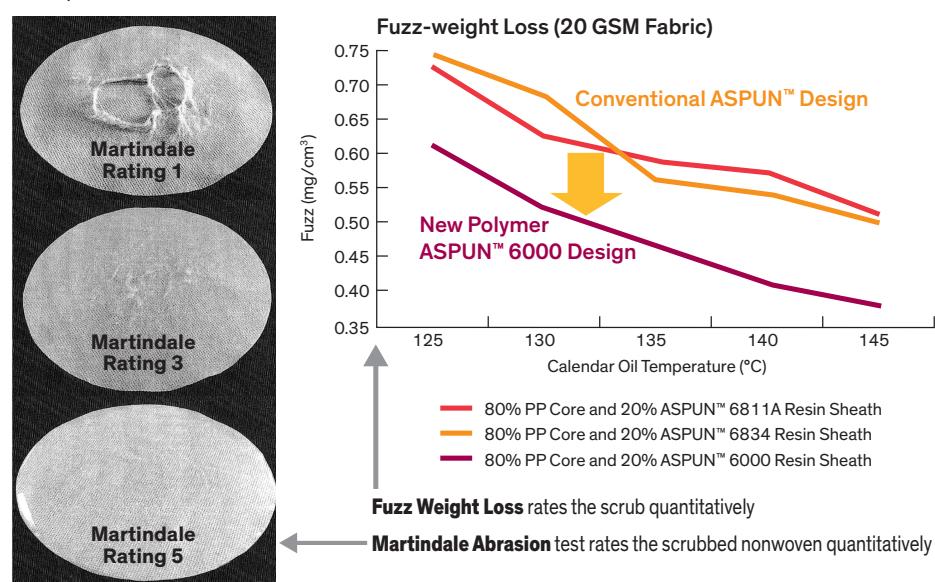


Figure 2: 20% Improvement on Abrasion Resistance Applying New Polymer Technology for Bico Spunbond Fibers



A Commitment to Sustainable Nonwoven Innovation

Dow assesses sustainability by considering the full life cycle of a product – an objective, scientific approach that provides a comprehensive view of a product from cradle to grave (or cradle to cradle, when alternative end-of-life options are available). In hygiene nonwovens, Dow is addressing the need to decrease product weight, reduce waste, improve energy efficiencies, promote better end-of-life options, and find

viable alternative material solutions through the use of renewable resources – without sacrificing performance of the end product. Advancements in ASPUN™ Fiber Grade Resins have allowed for down gauging, without sacrificing performance – an important sustainability trend in hygiene nonwovens.

Always Working on the Next Breakthrough

Every day, the technical team at Dow is at work – answering our customers' toughest questions, collaborating on the next great nonwoven idea, or using our own fiber spinning equipment in Europe and North America to test each

and every one of those ideas... until it's perfected. Dow is well aligned with the leading nonwoven equipment manufacturers for testing and scale-up of our resins. So, when you buy resins from Dow, you're getting some of the most innovative materials in the nonwovens industry as well as the confidence and support you would expect from a world leader in material science and technology. Dow is constantly working on the next ASPUN™ innovations, so be on the lookout for more to come.

For more information, contact us at one of the numbers below and visit www.dowaspun.com.

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