



NONWOVEN TERMS

For the informed employee

Nonwoven Fabric

Nonwoven fabric by definition is fabric made by means other than weaving. There are many ways to bond fibers but they all fall within three main methods: mechanically interlock the fibers, glue the fibers together, or melt the fibers together.

- Mechanically interlocking includes needlepunch and spunlace (hydroentangled)
- Gluing the fibers includes saturate bonding and spray bonding. Usually a latex adhesive is applied to the fibers and then the fabric is dried.
- Melting fibers together can only be accomplished with synthetic, thermoplastic fibers or with a blend of fibers containing thermoplastic fibers or fusible powders. These methods include thermal bonding (heat applied to the web with or without pressure) a carded web, thermobonding a spunlaid web with a calendar, thermobonding a melt blown or flash spun web with a calendar, thermobonding a carded or air laid high loft web in an oven.

There are many, many varieties of nonwoven fabric because more than one type of bonding can be applied to a fabric to enhance its properties. For instance, a needlepunched fabric can be calendered with heat and pressure and then heated with infrared to produce geotextiles. A melt blown fabric can be sandwiched between two layers of spunlaid fabric to produce a fabric called SMS which is used in hospitals.

Before nonwoven fabrics reach the consumer they are often treated with coatings to give them properties such as being waterproof, flame retardant, antimicrobial, absorbent, dyeable, and fusible. Additionally, many have chemicals applied so the fabric becomes a delivery system for furniture polish, cleaners, skin care products, auto care products, and so forth. The uses are almost endless.



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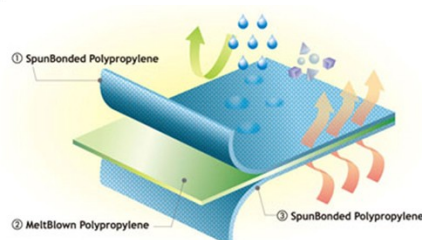


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“You don't get to choose how you're going to die. Or when. You can only decide how you're going to live. Now.” Joan Baez

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