

Creating solutions for the nonwoven industry



LyondellBasell (LYB) produces materials that are key to advancing solutions in nonwoven applications for Hygiene, Agriculture, Healthcare, Automotive, and other markets. LYB offers a full range of products that can be used in nonwoven applications: polymers, masterbatches, additives and PB-1 for Hot Melt Adhesives formulations.

LYB offers resin, masterbatches and color concentrates sourced from renewable raw materials. With our sites being ISCC+ certified, we offer a globally recognized third party certification that provides assurance of the origins of the raw materials and correct operation of the mass balance system.

The nonwoven solution offer includes:

- Polymer and copolymers that can be used for staple fibre and spunbonded nonwovens
- Polymers for the production of meltblown applications
- A range of masterbatches and additives to improve breathability, UV resistance and processing
- PB-1 Koattro that can be used in Hot Melt Adhesive formulations for optimal dosing, tackiness, setting time and low odor

Brand Name	Type	Description
Moplen	Spunbond	LYB offers a wide range of polymers and copolymers for the production of lightweight spunbonded nonwovens with high loft.
Moplen	Staple Fibers	Our range of polymers can be used for the production of fine denier and high tenacity staple fibers for nonwovens.
Moplen	Meltblown	Our meltblown portfolio is setting new references in terms of processability and performance. The products deliver a markedly improved barrier performance as well as soft-touch characteristics that add value to sanitary products.
Koattro	Hot Melt Adhesives	Koattro that can be used in Hot Melt Adhesive formulations for optimal dosing, tackiness, setting time and low odor.

Brand Name	Type	Description	PB-1	PP	PET
Polybatch Breathable	Breathable	Masterbatches and compounds for the processing of mono-orientated, breathable films for hygienic and building and construction applications.	+	+	-
Polybatch Color	Colors	Color concentrates for production of fibers, spunbond & melt blown nonwoven with excellent dispersion.	+	+	+
Polywhite	White	White masterbatches with various concentrations for production of fibers & nonwoven with excellent dispersion.	+	+	+
Polyblak	Black	Black masterbatches providing coloring and UV-protection in fibers and nonwoven.	+	+	+
Polybatch Additives	UV-stabilizers	LYB offers a wide range of UV stabilizer masterbatches: standard grades to high-performing stabilizer packages based on the latest technology of UV stabilizers.	+	+	-
	Flame Retardant	Halogen-free flame retardant solution for PE or PP-fibers and nonwoven.	+	+	-
	Anti-oxidants	Antioxidants for processing (short-term stabilization) and long-term stabilization.	+	+	-
	Anti-static	Antistatic masterbatches especially designed for fibers, spunbond and meltblown nonwoven.	+	+	-
	Softness - Slip	Additives to increase the slip properties and adding silky softness to PP nonwovens.	-	+	-
	Electret	Masterbatches to increase the density and depth of the charge, trapping energy in the melt blown nonwoven fabric, improving the filtration of the final product in hygiene and industrial applications.	-	+	-
	Processing Additives	Masterbatches for improving the processing and reducing deposits during production of fibers & nonwoven.	+	+	-

Case study: Diapers

A diaper may look quite simple, but you will be amazed by the engineering involved in its manufacturing and the materials which make it work.

A diaper is made of different layers, each one fulfilling a different function.

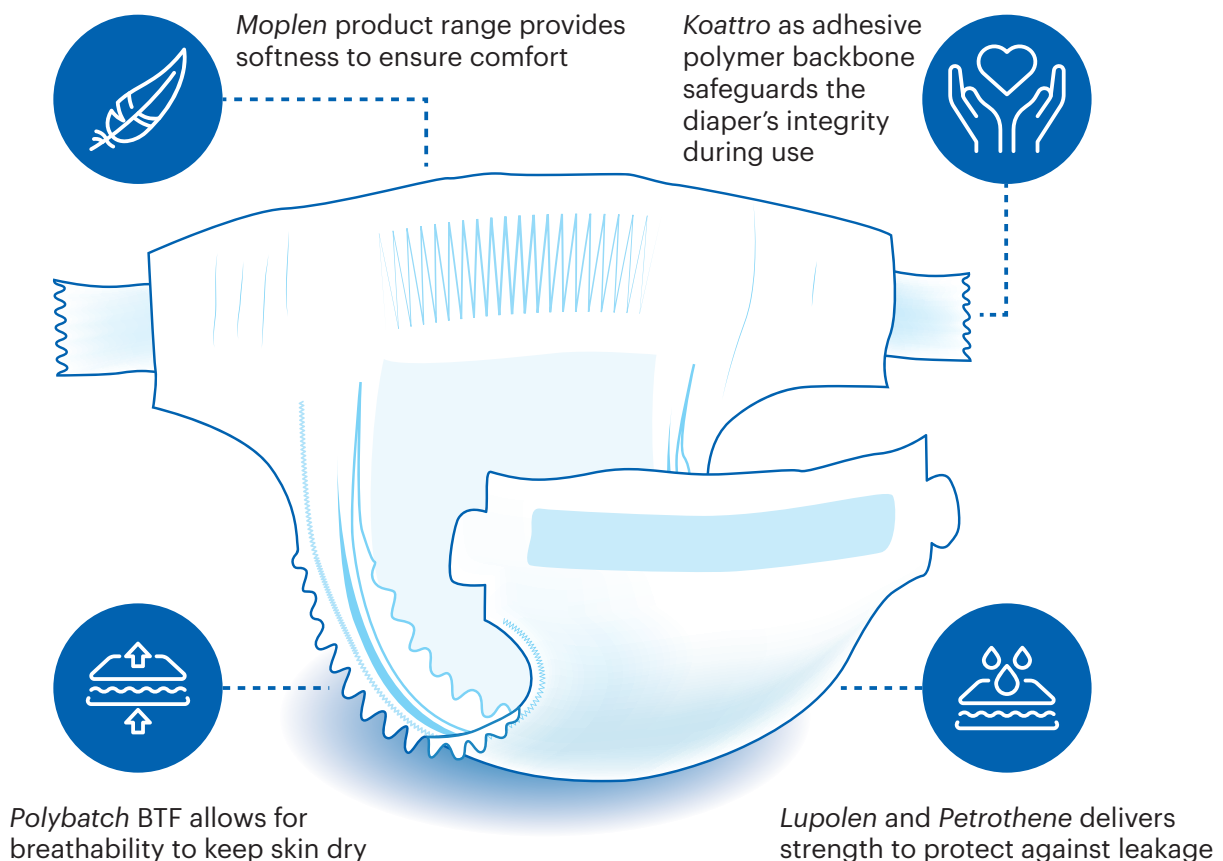
The inner layer which is in direct contact with the skin, is known as the top-sheet and plays the role of keeping your baby's skin dry and comfortable. This nonwoven fabric is typically made of polypropylene (PP). LYB offers a wide range of *Moplen* products for this application that allow the production of very fine fibers for softness and comfort.

In the core of the diaper, super-absorbent material quickly absorbs liquids, keeping the skin dry.

The outer layer is the back sheet which ensures that no leakage occurs while being breathable at the same time. It is constructed by lamination of a multi-layer PP nonwoven fabric with a soft polyethylene (PE) film. PE grades from the LYB *Lupolen* and *Petrothene* product range provide strength, softness and discreetness, while *Polybatch* BTF masterbatches provide breathability allowing heat and vapor to dissipate through the film.

In order to assemble these components, hot-melt adhesives are applied in an automated high precision dosing process that safeguard the diaper's integrity, while providing maximum comfort during use. *Koattro* is a polyolefin material designed to develop adhesive products for hygiene applications. *Koattro* is now offered from renewable raw materials, producing it in ISCC plus certified plants and helping our customers meet their sustainability requirements.

LYB is providing the right materials for the hygiene market, where properties like softness, transpirability and mechanical strength are required.



About us

We are LyondellBasell (LYB) – a leader in the global chemical industry creating solutions for everyday sustainable living. Through advanced technology and focused investments, we are enabling a circular and low carbon economy. Across all we do, we aim to unlock value for our customers, investors and society. As one of the world's largest producers of polymers and a leader in polyolefin technologies, we develop, manufacture and market high-quality and innovative products for applications ranging from sustainable transportation and food safety to clean water and quality healthcare. For more information, please visit www.lyb.com or follow [@LyondellBasell](https://www.linkedin.com/company/lyondellbasell) on LinkedIn.

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