

Absorbent Hygiene Products components: BABY DIAPERS



Component	Functions	Material	Example of potential material components
Top Sheet (skin contact)	Brings comfort and keeps the skin dry/clean/comfortable by transferring the liquid to the acquisition distribution layer (ADL)	Ultra-thin cover made of cellulosic fibres, synthetic fibres or film of synthetic polymers	Polyester Polyethylene Polypropylene Mixture of Polyethylene/Polypropylene Viscose/rayon Cotton
Acquisition distribution layer (if applicable)	Transports liquid from the surface to the core of the product, where the liquid is locked in	Porous material consisting of cellulosic or synthetic fibres or nonwovens made of synthetic polymers	Polyester Polyethylene Polypropylene Viscose /rayon Cotton
Core wrap	Material that encircles absorbent core for core integrity and to contain the super absorbent polymer (SAP) or a mix of SAP and cellulosic fibres	Synthetic fibres or nonwovens made of synthetic polymers or cellulosic fibres	Polyester Polyethylene Polypropylene Viscose/rayon
Absorbent Core	Absorbs and locks in the liquids	Cellulosic or/and synthetic fibres with or without a super absorbent polymer (SAP) or SAP without fibres	Cellulose/Pulp fibre Cotton Superabsorbent polymer Polyester Polyethylene Polypropylene
Containment flap with elastic	Prevent leakage out of the diaper and to optimise fit	Nonwovens made of synthetic polymers	Polyethylene Polypropylene Polyurethane Synthetic elastic
Waistband (if applicable)	Provides/improves fit around the waist	Nonwovens made of synthetic polymers	Polyethylene Polypropylene Polyurethane Synthetic elastic

Backsheet	Waterproof layer to prevent leakage	Film/nonwoven made of synthetic polymers or cellulosic fibres	Polyethylene Polypropylene Cotton Calcium carbonate
Leg cuff with elastic	Prevent leakage (liquid feces) out of the diaper and to optimise fit	Nonwovens made of synthetic polymers	Polyethylene Polypropylene Polyurethane Synthetic elastic
Fastening system composed of: - Fasteners - Elastic ears (in case of self-gripping system) - A landing zone	Consists of a repositioning strip located on the front of the layer and fasteners attached to each rear side of the layer. Adhesive and self-gripping systems are the two repositioning existing systems that allows a better fit to baby	Synthetic polymers Adhesive	Polyethylene Polypropylene Polyurethane Synthetic elastic Thermoplastic polymers
Elastics	To maintain the diaper on baby	Elastic thread	Elastane

- a. Some layers may be colored by Inks, pigments and dyes used in small amounts to assist in the identification of components for ease of use and to make the products more appealing to use. Wetness indicators can exist, mainly used for the small sizes of diapers. It consists in color changing indicating that baby's diaper is ready to be changed. Composed by soluble inks or soluble adhesive
- b. Lotion may be added to protect the skin from over hydration and help reduce irritation. The added lotion is regulated under the EU Cosmetics Regulation (EC) N° 1223/2009. If so, the lotion should be indicated on the packaging (INCI list).
- c. Some diapers are fragranced and if so, it is indicated on the pack.
- d. In order to maintain the integrity of different components, spots of glue composed of thermoplastic polymers are used.