

BABY DIAPERS AND NAPPIES

from raw materials to your supermarket shelf

A brief history of the baby diaper

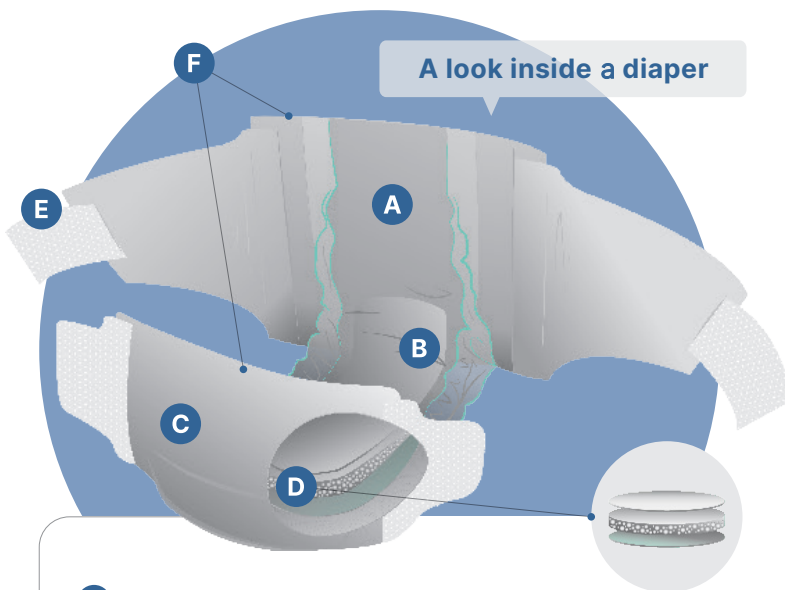
Since their invention in the 1930s, single-use diapers have continuously improved, becoming lighter, more compact, more absorbent and easier to use with more than 95% of all parents and carers (in many countries) using them. Since 1987, baby diapers have become 50% lighter, thanks to the use of fewer raw materials. As today's diapers are also thinner, transportation to your local store or supermarket is achieved with much lower energy use as well.

Modern diapers are recognised by doctors as being safe for infant skin, by keeping babies' skin dry, and have helped make diaper dermatitis (or nappy rash) not only less common, but also much less severe.

Around 33 billion nappies and diapers are sold across Europe every year.

How are they made?

While each brand or type of baby diaper (also called a 'nappy' in some countries) will be a little different, they are generally manufactured by the steps below. The steps illustrate a traditional diaper with fastening systems, whereas types like pant diapers only use elastics.



A TOP SHEET

A soft nonwoven sheet to ensure a comfortable feel against the skin

B ACQUISITION LAYER

An open structure nonwoven or cellulose layer to quickly transport fluids away from the skin

C BACKSHEET

A waterproof film-based layer to ensure there is no leakage out of the product. Some diapers include a breathable film for increased skin comfort. Additionally, some products come with printed design and graphics

D CORE

Absorbing materials (mostly superabsorbent materials and cellulosic fibres) to absorb fluids

E FASTENERS

Strips to secure the diaper around the baby and give a comfortable fit. The strips can stretch and easily be opened and possibly refastened

F ELASTICS

Elastic material is placed around the waist and legs to ensure a better fit, protection against leakage and comfort for the baby



RAW MATERIALS

Diapers are made from soft nonwoven materials, elastic materials, polyethylene film, superabsorbent polymers and cellulose (fluff pulp).



HANDLING OF RAW MATERIALS

After opening the packaging, and during manufacturing, the raw materials are stored in a safe environment where temperature and humidity is controlled.



DIFFERENT MATERIALS FOR EACH PART OF THE DIAPER

The materials for each part of the diaper are selected according to the type of the diaper, and to deliver benefits like elasticity, softness and absorption.



MAKING THE DIAPER

The various parts of a diaper, such as the core, the fastening system and elastics, are put together. Some diapers may be fragranced, others may contain odour absorbing ingredients. And some may contain a skin protection balm to protect the baby's bottom.



TESTING

Different tests are carried out on samples during the manufacturing process, and on the final diaper to ensure the products meet high quality and safety standards.



PACKAGING

Diapers are wrapped into a consumer pack, and put in protective packaging during the transport to your local supermarket or store.