ABSTRACT: A baby's napkin comprises a paper-thin backing sheet having a central crutch portion and a back portion at the top of the sheet which is wider than a front portion at the bottom of the sheet, so that in use the ends of the back portion overlap end areas of the front portion, and one face of each pair of overlapping faces carries an area of pressure-sensitive adhesive protected by a strippable covering.
NAPKIN FOR BABIES

BACKGROUND OF THE INVENTION

This invention relates to the manufacture of napkins for babies and has for its main object to manufacture a napkin which is essentially comfortable for the baby, easy to apply without the use of pins, efficient in use and wholly disposable.

SUMMARY

A napkin for babies constructed according to the present invention is characterized by an impermeable backing sheet of paper thickness (about .025 mm. thickness) comprising a marginal back portion at the top and a marginal front portion at the bottom of the backing sheet, the backing sheet having a central crutch portion between the said marginal portions and having side edges adapted to fit around a baby's thighs when the napkin is applied to the baby, the back at the top of the backing sheet being wider than the front portion at the bottom of the backing sheet so that in use the ends of the back portion overlap the end areas of the front portion to an extent sufficient to provide holding areas with adhesive inside the overlapping faces, one face of each pair of overlapping faces being provided with an exposed pressure-sensitive adhesive protected by strippable covering.

A backing sheet used in napkins constructed according to the present invention may be a thin sheet produced from one of the industrial plastics in the circumstances of use, and may be covered with tissue paper. The plastic sheet material used must be soft and easily pliable in any direction and if a paper covering is used, this must be intimately secured thereto over the whole area of to avoid ruffling.

In referring to the backing sheet as being impermeable reference is made to the character of the plastic element of the backing sheet, and the term “impermeable” means what is generally referred to in the art to which the present invention belongs, as “waterproof.”

A napkin for babies constructed according to the invention preferably comprises at each end of the marginal back portion at the top of the backing sheet a securing tab having an adhering plastics film coated with a pressure-sensitive adhesive temporarily protected by siliconized release paper whereby on stripping the release paper the pressure-sensitive adhesive can be applied to the end areas of the marginal front portion and finger pressure exerted to secure together the end areas of the front and back portions of the backing sheet.

A napkin for babies constructed according to the present invention may also comprise a wad of absorbent material of a width slightly less than the minimum width of the crutch portion of the backing. The absorbent wad preferably consists of fluffed cellulose pulp covered with a nonwoven fabric material secured by adhesive to the backing.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of the backing sheet, in one example of the invention, showing the securing tabs on the marginal back portion at the top of the backing sheet and a symmetrically arranged absorbent wad.

FIG. 2 is a view showing the first step in using the napkin constructed according to the invention in which the front portion is folded towards the back portion.

FIG. 3 is a view similar to FIG. 1 showing the second state where the release paper is removed from the adhesive tabs.

FIG. 4 shows the final step in which the end areas and the securing tabs of the back portion are folded over onto the outside face of the front portion ready for securing the two together in the overlaps by thumb and finger pressure.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In the drawings the impermeable backing sheet is generally identified by the reference 10, the backing sheet being formed from a sheet of plastic material, such as polyester, the thickness of the sheet being about .025 mm., and comprising at the top of the backing sheet the back portion of the napkin indicated by reference 12 and at the bottom of the backing sheet the front portion of the napkin indicated by the reference 11.

Between the back and front portions of the napkin the side edges are similarly shaped to fit around a baby's thighs, the central area of the napkin constituting a crutch portion 13.

An absorbent wad 14 overlies the crutch portion and extends nearly to the top and to the bottom of the backing sheet as clearly shown in FIG. 1. The wad 14 has a width slightly less than the minimum width of the crutch portion 13. The wad 14 in the embodiment shown consists of fluffed cellulose pulp covered with a nonwoven fabric material secured to the backing sheet by adhesive. Alternatively the wad may be enclosed in a permeable covering, which may be formed of knitted gauze, and the gauze may be secured to the backing sheet to hold the wad in required medial position.

At each end of the marginal back portion of the backing sheet, are tabs, generally indicated at 15, which, in use, overlap the end areas of the front portion, and are provided with adhesive surfaces for securing the end areas of the back portion onto the outer face of the front portion.

As clearly shown in FIG. 3 the tabs 15 have an adhesive surface 17 protected by a strippable covering 16 of siliconized release paper until the napkin is going to be used. When the napkin is to be fitted onto a baby, the front portion of the napkin is drawn upwardly, as indicated by the arrows 18 in FIG. 2, the protective covering 16 is stripped back and exposes the adhesive surface 17 which is then ready to engage the outer surface of the front portion 11 of the napkin. The covering 16 is preferably coloured for ease of identification.

It will be seen that by varying the position at which the adhesive tab 15 is applied to the front portion 11, a variation in the waist measurement of the napkin is afforded. Variations in the thigh measurements are also afforded by selection of the position at which the tabs are secured to the front portion.

As shown in FIG. 4, following the removal, or part removal, of the protective covering 16 the end areas of the back marginal portion of the napkin are folded onto the outer face of the front marginal portion of the napkin and then finger and thumb pressure is exerted on the overlap produced to secure the napkin in position without the use of pins or other hard elements such as press-studs.

The removal of the covering 16 and the fixing of each adhesive tab 15 to the front portion may be effected almost as a simultaneous operation, similar to the application of sticking plaster onto a person's skin, such operation being rapidly and easily performed.

The backing sheet, instead of being constituted solely by the thin sheet of polyvinyl chloride, may be a sheet of the plastic material covered with a tissue, the tissue being closely adherent to the plastic sheet over the whole area of contact so as to avoid ruffling. The employment of the tissue makes the napkin more comfortable to apply by eliminating the contact of the relatively cold plastic surface to the limbs and body of the child.

The adhesive surfaces 17 of the tabs 15 may be formed of a pressure-sensitive adhesive which may be that obtainable on the open market in ribbon form, the ribbon being coated with a film with adhesive coated on each face and with each coating protected by an overlying siliconized release paper, a length sufficient for each tab being cut from the ribbon.

In the course of manufacturing a backing sheet according to the invention, the paper on one face only of the ribbon material is removed immediately before application of cutoff sections thereof to the tabs 15, then the sections of adhesive ribbon are pressed onto the tabs 15 with the siliconized release paper still adhering to the outside thereof. The napkin is then ready for use in the manner described above.
Alternatively, the adhesive may be coated directly onto the tabs of the back marginal portion, and then covered with release paper.

As regards the formation of the impermeable backing sheet, instead of blanking it out of a sheet of polyvinyl chloride, sheets of polypropylene or other polyolefins, polyamide of polyester may be employed.

By use of the present a readily applied (without the use of pins) napkin is produced which is exceptionally soft to the child and is effective for the purpose intended. At the same time it is easy to remove the napkin as a disposable article by tearing the thin backing material.

The adhesive may equally well be applied to either face of each pair of overlapping faces. For example, as an alternative to providing the pressure-sensitive adhesive on the inside face of the tabs 15, with the same shape of backing sheet 10 the adhesive may be applied to the outside face of the overlapping end areas of the front portion 11.

Furthermore, if the end areas of the front portion 11 were to be slightly extended, adhesive could be applied to the inner surfaces of these extensions for fixing to the outside of the end areas of the back portion 12.

I claim:

1. A napkin for babies characterized by an impermeable backing sheet of paper thinness (about .025 mm. thinness) comprising a marginal a back portion at the top and a marginal front portion at the bottom of the backing sheet, the backing sheet having a central crutch portion between the said marginal portions and having concave arcuate side edges adapted to fit in a fluid-tight manner around a baby's thighs when the napkin is applied to the baby, the back portion at the top of the backing sheet being wider than the front portion at the bottom of the backing sheet so that in use the ends of the back portion overlap the end areas of the front portion to an extend sufficient to provide holding areas with adhesive inside the overlapping faces, one face of each pair of the overlapping faces being provided with an exposable pressure-sensitive adhesive protected by strippable covering.

2. A napkin for babies according to claim 1, comprising at the ends of the marginal back portion of the back sheet an adhesion plastic film coated with a pressure-sensitive adhesive temporarily protected by siliconized release paper, whereby the release paper the pressure-sensitive adhesive can be applied to the ends of the marginal front portion and finger pressure exerted to secure together the said end areas of the marginal front and back portions of the backing sheet.

3. A napkin for babies according to claim 1, comprising a wad of absorbent material of a width slightly less than the minimum width of the crutch portion of the backing sheet, there being only a single sheet of material, said wad being secured to said single sheet and presenting a free and unobstructed outer surface for direct contact with a baby's body.

4. A napkin for babies according to claim 1, comprising an absorbent wad consisting of fluffed cellulose pulp covered with nonwoven fabric secured by adhesive to the backing sheet.

5. A napkin for babies according to claim 1, including an absorbent was wad secured on the backing sheet by gauze material covering the wad and adhesively held in position on the backing sheet.

6. A napkin for babies according to claim 1, wherein the backing sheet is blanked out of a sheet of impermeable material and covered by tissue paper adhesively secured to the whole area of contact with the backing sheet.