

Description

Field of Invention

This invention relates to a sanitary napkin according to the preamble of claim 1. Such a sanitary napkin is previously known from US-A-4 608 047.

Background of the Invention

Sanitary napkins having side panels intended to overlie the outer crotch portion of an undergarment have been proposed as a means of improving security of attachment and protecting the edges of the garment from soiling. US-A-4,608,047 discloses one such napkin wherein the side flaps overlap each other in the area in which they overlie the outer crotch portion of the undergarment. In a preferred embodiment the flaps are provided with means for securing them in place such as a pressure sensitive adhesive positioned so that the flaps adhere to each other in the area where they overlap, or adhere to the outer crotch portion of the garment, or both.

US-A- 4,285,343 discloses a similar napkin wherein each side panel is provided with adhesive means so that when the side panels are folded over the outer surface of the undergarment each panel is adhesively secured in place. The panels may overlap so that one is secured to the other and the other is secured to the undergarment, or the panels may merely abut one another with each panel individually adhesively secured to the undergarment. The present invention is directed to a sanitary napkin having side panels wherein the panels are held in position overlying the outer crotch portion of the undergarment by a single strip of adhesive tape which is pre-attached to one panel. When the napkin is applied, the adhesive-free panel is first folded over the crotch portion of the garment followed by the second panel with the attached tape tab. The side panels and tape tab are of sufficient length to assure secure attachment of the tape tab to the opposing panel.

For convenience of application, the tape tab is applied to the liquid permeable cover of the napkin which faces to the outside when the napkin is in position. A particularly preferred napkin utilizes an apertured polyethylene film as the liquid permeable cover, and this film has presented a unique problem in connection with the adhesive tape tab. On one hand, the polyethylene film composition and the large open area requires a fairly aggressive adhesive to ensure security of attachment to the apertured film material. On the other hand, the film is very thin and tears easily due to the presence of the apertures. Thus, difficulties have been experienced in providing an adhesive composition which

is effective in this use.

It is accordingly an object of the present invention to provide an improved sanitary napkin having side flaps with adhesive means for securing such side flaps around the outer crotch portion of an undergarment. It is a further object of this invention to provide a sanitary napkin having side flaps wherein the flaps are secured by means of a tape tab extending from the edge of one flap to the surface of the other. It is a still further object of this invention to provide an adhesive tape tab for securing the flaps of a sanitary napkin which provides secure attachment to an apertured film facing, and yet permits detachment without extensive tearing of such facing material. These, and other objects of this invention, will be apparent from the ensuing description and claims.

The solution to the problem posed by the application is given by the features in the characterizing portion of claim 1.

Summary

The sanitary napkin of the present invention comprises, in its basic construction, an absorbent core covered on one side with a moisture impervious backing material, and on the other side with a moisture permeable apertured polymeric film. The napkin includes side flaps comprising extensions of the backing and facing materials. A tape tab secured to the facing material of one side flap extends beyond the edge of the flap, and includes a release paper to protect the otherwise exposed adhesive surface on the free end of the tape tab. The tape tab and side flaps extend to a degree sufficient so that when folded over the crotch portion of the undergarment, the free end of the tape tab extends over the surface of the opposing side flap and may be secured thereto.

The tape tab is constructed of a backing material such as film, paper or fabric, coated with an adhesive mass based on mixtures of A-B-A and A-B block copolymers formulated with a tackifying resin and having an adhesion to steel of from about 837 to 1563 g/cm (75 to 140 oz/inch) width. Such adhesive compositions adhere well to the apertured polymeric film, yet release cleanly when desired without significant tearing of the film material.

Description of Drawings

Figure 1 is a top plan view of a sanitary napkin showing the placement of the tape tab in accordance with the present invention.

Figure 2 is a transverse cross-sectional view through the center of the napkin of Figure 1 showing the construction of the napkin.

Figure 3 is a bottom plan view of the napkin of Figure 1 as attached to an undergarment with the side flaps folded and secured by the tape tab.

Description

The sanitary napkin of the present invention indicated generally at 10 in Figure 1, comprises a central elongated absorbent portion 11 which may be substantially rectangular or hourglass shaped as illustrated. Extending laterally from the longitudinal side edges of the central portion are side panels or flaps 12 and 13. Adhesively attached to panel 12 is tape tab 14 which extends beyond the edge of the panel as illustrated. The exposed adhesive surface on the free end of the tape tab is protected by a release paper 15 as best seen in Figure 2.

The basic construction of the napkin is illustrated in the cross sectional view of Figure 2, taken through line 2-2 of Figure 1. Central absorbent element 16 is enclosed between backing sheet 17 and a liquid permeable facing sheet 18. The backing and facing sheets are sealed together at 19 along the outer edge of the napkin by heat seal or adhesive means. In addition, backing and facing sheets are preferably sealed together at 20 across the flap area adjacent the central absorbent element.

The absorbent element is preferably wood pulp or other conventional absorbent material known for use in sanitary napkins. The backing sheet is preferably a polymeric film, such as polyethylene, but may be any moisture impermeable material suitable for this use. The moisture permeable facing material 18, in accordance with the present invention, is a thin apertured polymeric film. The tape tab preferably comprises a substrate such as a polyester film 21 coated with adhesive mass 22 as more fully described hereinafter.

Apertured polyolefin films, particularly polypropylene and polyethylene, have been widely used as cover materials for absorbent products since these films are inexpensive, nonabsorbent and readily produced. Suitable films generally have a thickness of from about 0.0254 to 0.762 mm (1 to 30 mils), more preferably 0.0762 to 0.254 mm (3 to 10 mils), and an open area of about 30 to 60 percent. A particularly preferred material for use as a cover is a coextruded apertured film of polyethylene and ethylene vinyl acetate (EVA) as described in U.S. Patent No. 4,690,679 wherein the film has an average open area of about 42%, a thickness of about 0.1143 mm (4.5 mils), and a weight of about 33.91g/m² (1 oz. per sq. yard). The apertures have an average equivalent diameter of about 0.4064 mm (0.016 inches) and an average center-to-center spacing of about 0.7112 mm (0.028 inches). The polyethylene side of the film, which is used as the

body contact side, has a higher melting point than the EVA side of the film, permitting the film to be thermally bonded while maintaining structural integrity. The outer polyethylene component of the film may be delustered with calcium carbonate while the EVA component may be pigmented with TiO₂ to increase the opacity of the film.

As further illustrated in Fig. 2, the afore described sanitary napkin may include one or more adhesive strips 23 on the outer surface of the central longitudinal portion of the backing material for attaching the napkin directly to the undergarment. When present, the adhesive strips are protected by release paper 24 until the napkin is ready for use. These structural elements and the materials which may be used in the sanitary napkin of the present invention are conventional for sanitary napkins and are well known in the art. Additionally, many variations in the construction and selection of materials are possible and included within the scope of the present invention.

The positioning of the napkin in use is illustrated in Figure 3 where napkin 10 is shown attached to the crotch portion of undergarment 30 with side flaps 12 and 13 folded to enclose the underside of the garment. The free end of tape tab 14, with release paper 15 having been removed, is attached to the apertured film surface of flap 13 to secure flaps 12 and 13 in their folded position. When the napkin is to be removed, tape tab 14 must be detached from the surface of flap 13, and prior to the present invention, such removal often resulted in tearing of the apertured film cover material.

Side panels 12 and 13 may overlap, abut or be spaced apart when folded around the outer surface of the undergarment. When the side panels are dimensioned so that the ends are spaced apart in the folded configuration, the tape tab must be of sufficient length to span the distance and still attach securely to the surface of the opposite panel. This configuration does have the advantage of adhering the side panels to the fabric of the undergarment as well as to each other, and thus enhances the security of the attachment of the napkin.

The adhesive mass 22 applied to the tape tab 14 in accordance with the present invention is preferably a tackified styrene-isoprene-styrene/styrene-isoprene block copolymer as disclosed in U.S.P. 4,554,191. As described therein, A-B-A block copolymers such as those disclosed in US-A- 4,136,071 and 3,676,202 can be rendered highly tacky by mixing certain combinations of A-B and A-B-A block copolymers with a high proportion of solid tackifying resin. Alternatively, the adhesive can be produced by using a styrene-isoprene-styrene copolymer which is polymerized to the correct A-B/A-B-A block ratio as is the case with Kraton

1117 (a thermoplastic elastomeric A-B-A/A-B copolymer sold by the Shell Chemical Company). The A-B-A/A-B copolymer may be tackified with a high loading of various solid tackifying resins like hydrocarbon, polyterpene or rosin esters, and may include various antioxidants and other additives. The adhesive formulation may be coated onto the substrate by extrusion, hot melt, calendar, or solvent methods.

The adhesive composition preferably comprises an elastomeric component comprising from about 25 to 85 parts by weight of a simple A-B block copolymer wherein the A blocks are derived from styrene or styrene homologues and the B blocks are derived from isoprene, and about 75 to 15 parts of an A-B-A block copolymer wherein the A and B blocks are as defined above. The A blocks in the A-B block copolymer preferably constitute about 10 to 35% by weight of the A-B copolymer and the total A-B and A-B-A copolymers preferably comprise not more than about 30% styrene. The elastomeric component is formulated with from about 100 to 150 parts of a solid tackifier, said parts being parts per 100 parts by weight of the elastomeric component. Most preferably, the adhesive layer comprises about 25 to 65 parts of the A-B copolymer, about 75 to 35 parts of the A-B-A copolymer, and about 120 to 140 parts by weight of a solid tackifier resin all per 100 parts by weight of the A-B-A/A-B elastomeric component. U.S. Pat. Nos. 3,239,478, and 3,676,202 provide a good description of the elastomeric block copolymers utilized in the present invention.

A particularly preferred formulation for adhesive layer 22 has the following formulation:

Kraton 1117: 100 parts (Kraton 1117 is a polystyrene-polyisoprene-polystyrene thermoplastic elastomer sold by the Shell Chemical Company believed to comprise about 35 parts A-B and 65 parts A-B-A).

Wingtack Plus: 120 parts (Wingtack Plus is a solid tackifier resin sold by Goodyear Tire and Rubber Company, consisting predominately of polymerized structures derived from piperylene and isoprene with a softening point of about 95°C.)

Butyl Zimate: 2 parts (Trademark for zinc di-n-butylthiocarbamate, an anti-oxidant)

Santovar A: 1 part (Trademark for 2,5-di-tert-amylhydroquinone, an anti-oxidant).

The substrate utilized in the adhesive tape tab of the present invention preferably comprises a plastic film, nonwoven fabric, woven fabric or paper. The preferred substrate is 0.0254 mm (1 mil) polyester film.

The adhesion value of an adhesive tape is defined as that force required to strip or peel away a pressure-sensitive adhesive tape which has been secured to the surface of a clean stainless steel

plate, and is quantified as g/cm (oz/inch) of tape width. Adhesive layer 22 preferably has an adhesion value of from about 837 to 1563 g/cm (75 to 140 oz/inch) width, and preferably about 1116-1339 g/cm (1100-120 oz/inch) width. This level of adhesion, combined with the tack and release properties of the A-B-A/A-B adhesive disclosed herein is found to provide secure attachment to apertured polymeric films and yet permit ready detachment without extensive tearing the film material.

From the foregoing it will be observed that the present invention is directed to an improvement in sanitary napkins having lateral side panels covered with a liquid permeable apertured film wherein the side panels are secured during use by an adhesive tape tab comprising a tackified A-B-A/A-B elastomeric copolymer adhesive formulation having an adhesion to steel value of from about 837 to 1563 g/cm (75 to 140 oz/inch) width. Numerous variations and modifications of the specific embodiments described herein may be effected without departing from the scope of this invention.

Claims

1. A sanitary napkin (10) comprising a central elongated absorbent portion (11) having a body facing side and a garment facing side and having side panels (12, 13) being foldable away from said body facing side of said central elongated absorbent portion (11) and covering the garment facing side thereof and extending laterally from each longitudinal edge (20) thereof, said absorbent portion (11) being covered on one side with a liquid permeable apertured polymeric film (18), said side panels (12, 13) being foldable around said central portion (11), and an adhesive element on one of the side panels (12,13),

characterized in that

said liquid permeable apertured polymeric film (18) also covers the outside surface of the side panels (12, 13) when said side panels (12, 13) are folded around said central portion (11), an adhesive coated tape tab (14) is secured to the apertured polymeric film (18) of one of the side panels (12, 13) with a portion of said tape tab (14) extending beyond the edge of said side panel (12, 13) and positioned so that, when said side panels (12, 13) are folded around said central portion (11), the free end of said tape tab (14) extends over the apertured film surface (18) on the other of said side panels (12, 13), and said tape tab (14) comprises an adhesive coating having an adhesion to steel value of from 837 to 1563 g/cm (75 to 140 oz/inch) width.



1117 (a thermoplastic elastomeric A-B-A/A-B copolymer sold by the Shell Chemical Company). The A-B-A/A-B copolymer may be tackified with a high loading of various solid tackifying resins like hydrocarbon, polyterpene or rosin esters, and may include various antioxidants and other additives. The adhesive formulation may be coated onto the substrate by extrusion, hot melt, calendar, or solvent methods.

The adhesive composition preferably comprises an elastomeric component comprising from about 25 to 85 parts by weight of a simple A-B block copolymer wherein the A blocks are derived from styrene or styrene homologues and the B blocks are derived from isoprene, and about 75 to 15 parts of an A-B-A block copolymer wherein the A and B blocks are as defined above. The A blocks in the A-B block copolymer preferably constitute about 10 to 35% by weight of the A-B copolymer and the total A-B and A-B-A copolymers preferably comprise not more than about 30% styrene. The elastomeric component is formulated with from about 100 to 150 parts of a solid tackifier, said parts being parts per 100 parts by weight of the elastomeric component. Most preferably, the adhesive layer comprises about 25 to 65 parts of the A-B copolymer, about 75 to 35 parts of the A-B-A copolymer, and about 120 to 140 parts by weight of a solid tackifier resin all per 100 parts by weight of the A-B-A/A-B elastomeric component. U.S. Pat. Nos. 3,239,478, and 3,676,202 provide a good description of the elastomeric block copolymers utilized in the present invention.

A particularly preferred formulation for adhesive layer 22 has the following formulation:

Kraton 1117: 100 parts (Kraton 1117 is a polystyrene-polyisoprene-polystyrene thermoplastic elastomer sold by the Shell Chemical Company believed to comprise about 35 parts A-B and 65 parts A-B-A).

Wingtack Plus: 120 parts (Wingtack Plus is a solid tackifier resin sold by Goodyear Tire and Rubber Company, consisting predominately of polymerized structures derived from piperylene and isoprene with a softening point of about 95°C.)

Butyl Zimate: 2 parts (Trademark for zinc di-n-butylidithiocarbamate, an anti-oxidant)

Santovar A: 1 part (Trademark for 2,5-di-tert-amylhydroquinone, an anti-oxidant).

The substrate utilized in the adhesive tape tab of the present invention preferably comprises a plastic film, nonwoven fabric, woven fabric or paper. The preferred substrate is 0.0254 mm (1 mil) polyester film.

The adhesion value of an adhesive tape is defined as that force required to strip or peel away a pressure-sensitive adhesive tape which has been secured to the surface of a clean stainless steel

plate, and is quantified as g/cm (oz/inch) of tape width. Adhesive layer 22 preferably has an adhesion value of from about 837 to 1563 g/cm (75 to 140 oz/inch) width, and preferably about 1116-1339 g/cm (1100-120 oz/inch) width. This level of adhesion, combined with the tack and release properties of the A-B-A/A-B adhesive disclosed herein is found to provide secure attachment to apertured polymeric films and yet permit ready detachment without extensive tearing the film material.

From the foregoing it will be observed that the present invention is directed to an improvement in sanitary napkins having lateral side panels covered with a liquid permeable apertured film wherein the side panels are secured during use by an adhesive tape tab comprising a tackified A-B-A/A-B elastomeric copolymer adhesive formulation having an adhesion to steel value of from about 837 to 1563 g/cm (75 to 140 oz/inch) width. Numerous variations and modifications of the specific embodiments described herein may be effected without departing from the scope of this invention.

Claims

1. A sanitary napkin (10) comprising a central elongated absorbent portion (11) having a body facing side and a garment facing side and having side panels (12, 13) being foldable away from said body facing side of said central elongated absorbent portion (11) and covering the garment facing side thereof and extending laterally from each longitudinal edge (20) thereof, said absorbent portion (11) being covered on one side with a liquid permeable apertured polymeric film (18), said side panels (12, 13) being foldable around said central portion (11), and an adhesive element on one of the side panels (12,13).

characterized in that

said liquid permeable apertured polymeric film (18) also covers the outside surface of the side panels (12, 13) when said side panels (12, 13) are folded around said central portion (11), an adhesive coated tape tab (14) is secured to the apertured polymeric film (18) of one of the side panels (12, 13) with a portion of said tape tab (14) extending beyond the edge of said side panel (12, 13) and positioned so that, when said side panels (12, 13) are folded around said central portion (11), the free end of said tape tab (14) extends over the apertured film surface (18) on the other of said side panels (12, 13), and said tape tab (14) comprises an adhesive coating having an adhesion to steel value of from 837 to 1563 g/cm (75 to 140 oz/inch) width.



2. The sanitary napkin of claim 1 wherein said adhesive coating of said tape tab comprises a thermoplastic elastomeric component and a resin component, said thermoplastic elastomeric component comprising from 25 to 85 parts of a simple A-B block copolymer wherein the A blocks are derived from styrene or styrene homologues and the B blocks are derived from isoprene, and from 75 to 15 parts of an A-B-A block copolymer wherein the A and B blocks are as defined above, the A blocks in the A-B block copolymer constituting from 10 to 35 percent by weight of the A-B copolymer, and the total A-B and A-B-A copolymers comprising not more than 30% styrene, said resin component comprising from 100 to 150 parts of a solid tackifier, all of said parts being parts per 100 parts by weight of the thermoplastic elastomeric component.
3. The sanitary napkin of claim 2 wherein said adhesive comprises 25 to 65 parts of the A-B copolymer and 75 to 35 parts of the A-B-A copolymer.
4. The sanitary napkin of claim 3 wherein said adhesive comprises 120 to 140 parts by weight of a solid tackifier resin.
5. The sanitary napkin of claim 1 wherein said apertured polymeric film comprises a polyolefin film.
6. The sanitary napkin of claim 5 wherein said polyolefin film is selected from the group consisting of polypropylene, polyethylene, and bicomponent polyethylene/ethylene vinyl acetate film.
7. The sanitary napkin of claim 1 wherein said apertured film has a thickness of from 0.0254 to 0.762 mm (1 to 30 mils) and from 30 to 60% open area.
8. The sanitary napkin of claim 7 wherein said film has a thickness of from 0.0762 to 0.254 mm (3 to 10 mils).
9. The sanitary napkin of claim 8 wherein said film is coextruded polyethylene/ethylene vinyl acetate having a weight of 33.91 g/m² (1 oz. per sq. yard).
10. The sanitary napkin of claim 1 wherein said adhesive has substantially the following formulation:
100 parts Kraton 1117 (registered trademark)
120 parts Wingtack Plus (registered trade-

mark)

2 parts Butyl Zimate (registered trademark)

1 part Santovar A (registered trademark)

5 Patentansprüche

1. Damenbinde (10), umfassend einen zentralen länglichen Absorptionsteil (11) mit einer dem Körper zugewandten Seite und einer der Bekleidung zugewandten Seite, der Seitenflügel (12, 13) aufweist, die von der dem Körper zugewandten Seite des zentralen länglichen Absorptionsteiles (11) wegfaltbar sind und die dessen der Bekleidung zugewandte Seite bedecken und die sich lateral von jeder seiner longitudinalen Kanten (20) erstrecken, wobei der absorbierende Teil (11) auf einer Seite mit einem flüssigkeitspermeablen, mit Löchern versehenen polymeren Film (18) bedeckt ist, wobei die Seitenflügel (12, 13) um den zentralen Teil (11) herum faltbar sind und ein Haftelement auf einem der Seitenflügel (12, 13) umfassen, dadurch gekennzeichnet, daß der flüssigkeitspermeable, mit Löchern versehene polymere Film (18) auch die äußere Oberfläche der Seitenflügel (12, 13) bedeckt, wenn diese Seitenflügel (12, 13) um den zentralen Teil (11) herum gefaltet sind, daß ein kleberbeschichtetes Verschließ- und Aufreißband (14) an dem mit Löchern versehenen polymeren Film (18) auf einem der Seitenflügel (12, 13) befestigt wird, wobei sich ein Teil des Verschließ- und Aufreißbandes (14) über die Kante des Seitenflügels (12, 13) hinaus erstreckt und so angebracht ist, daß, wenn die Seitenflügel (12, 13) um den zentralen Teil (11) herum gefaltet sind, das freie Ende des verschließ- und Aufreißbandes (14) über die mit Löchern versehene Filmoberfläche (18) des anderen der Seitenflügel (12, 13) reicht und das Verschließ- und Aufreißband (14) eine Kleberbeschichtung aufweist, die auf Stahl einen Adhäsionswert von 837 bis 1563 g/cm (75 bis 140 oz/inch) Breite aufweist.
2. Damenbinde nach Anspruch 1, worin der adhäsive Überzug des Verschließ- und Aufreißbandes eine thermoplastische elastomere Komponente und eine Harzkomponente umfaßt, wobei die thermoplastische elastomere Komponente 25 bis 85 Teile eines einfachen A-B-Blockcopolymeren umfaßt, bei dem die A-Blocks von Styrol oder Styrolhomologen abgeleitet sind und die B-Blocks von Isopren abgeleitet sind und 75 bis 15 Teile eines A-B-A-Blockcopolymeren umfaßt, bei dem die A- und B-Blocks die obige Definition aufweisen, wobei die A-Blocks in dem A-B-Blockcopolymeren 10 bis



35 Gew.% des A-B-Copolymeren betragen und die Gesamtmenge an A-B- und A-B-A-Copolymeren nicht mehr als 30 % Styrol enthalten, wobei die Harzkomponente 100 bis 150 Teile eines festen Klebrigmachers enthält, wobei sich alle diese Teile auf 100 Gewichtsteile der thermoplastischen elastomeren Komponente beziehen.

3. Damenbinde nach Anspruch 2, bei der der Klebstoff 25 bis 65 Teile des A-B-Copolymeren und 75 bis 35 Teile des A-B-A Copolymeren enthält.

4. Damenbinde nach Anspruch 3, bei der der Klebstoff 120 bis 150 Teile eines festen klebrigmachenden Harzes umfaßt.

5. Damenbinde nach Anspruch 1, bei der der mit Löchern versehene Film einen Polyolefinfilm umfaßt.

6. Damenbinde nach Anspruch 5, bei der der Polyolefinfilm ausgewählt ist aus der Gruppe bestehend aus Polypropylen, Polyethylen und einem Zwei-Komponenten-Polyethylen/Ethylenvinylacetatfilm.

7. Damenbinde nach Anspruch 1, bei der der mit Löchern versehene Film eine Dicke von 0,0254 bis 0,762 mm (1 bis 300 mils) und 30 % bis 60 % offene Fläche aufweist.

8. Damenbinde nach Anspruch 7, bei der der Film eine Dicke von 0,0762 bis 0,254 mm (3 bis 10 mils) aufweist.

9. Damenbinde nach Anspruch 8, bei der der Film coextrudiertes Polyethylen/Ethylenvinylacetat ist und ein Gewicht von 33,91 g/m² (1 oz/yd²) aufweist.

10. Damenbinde nach Anspruch 1, bei der das Adhäsiv im wesentlichen die folgende Formulierung aufweist:
100 Teile Kraton 1117 (eingetragenes Warenzeichen)
120 Teile Wingtack Plus (eingetragenes Warenzeichen)
2 Teile Butyl Zimate (eingetragenes Warenzeichen)
1 Teil Santovar A (eingetragenes Warenzeichen).

Revendications

1. Une serviette hygiénique (10) comprenant une partie centrale allongée absorbante (11) ayant

un côté faisant face au corps et un côté faisant face aux vêtements et ayant des panneaux latéraux (12, 13) qui peuvent être repliés à distance dudit côté faisant face au corps de ladite partie centrale allongée absorbante (11) et qui couvrent le côté faisant au vêtement de celle-ci, qui s'étendent latéralement depuis chaque bord longitudinal (20) de celle-ci, ladite partie absorbante (11) étant recouverte d'un film polymère perforé (18) perméable aux liquides, lesdits panneaux latéraux (12, 13) pouvant être repliés autour de ladite partie centrale (11), et comprenant un élément adhésif sur l'un des panneaux latéraux (12, 13),

caractérisée en ce que ledit film polymère perforé (18) perméable aux liquides recouvre également la surface externe des panneaux latéraux (12, 13) lorsque lesdits panneaux latéraux (12, 13) sont repliés autour de ladite partie centrale (11), une languette de ruban enduite d'adhésif (14) est fixée au film polymère perforé (18) d'un des panneaux latéraux (12, 13), une partie de ladite languette de ruban adhésif (14) s'étendant au delà du bord dudit panneau latéral (12, 13) et étant positionnée de telle sorte que, lorsque lesdits panneaux latéraux (12, 13) sont repliés autour de la partie centrale (11), l'extrémité libre de ladite languette de ruban adhésif (14) s'étende au dessus de la surface de film perforé (18) sur l'autre desdits panneaux latéraux (12, 13), et en ce que ladite languette de ruban adhésif (14) comprend un enduit adhésif ayant une valeur d'adhérence à l'acier qui va de 837 à 1563 g/cm (75 à 140 onces/pouce) de large.

2. Une serviette hygiénique selon la revendication 1, dans laquelle ledit enduit adhésif de ladite languette adhésif comprend un composant élastomère thermoplastique et un composant résine, ledit composant élastomère thermoplastique comprenant de 25 à 85 parties d'un copolymère bloc A-B simple dans lequel les blocs A sont dérivés du styrène ou des homologues du styrène, et les blocs B sont dérivés de l'isoprène, et de 75 à 15 parties d'un copolymère bloc A-B-A dans lequel les blocs A et B sont tel que défini ci-dessus, les blocs A dans le copolymère bloc A-B constituant de 10 à 35 % en masse du copolymère A-B, et le total des copolymères A-B et A-B-A ne comprenant pas plus de 30 % de styrène, lesdits composant résine comprenant 100 à 150 parties d'un agent de viscosité solide, toutes lesdites parties étant des parties pour 100 parties en masse du composant élastomère thermoplastique.



3. Une serviette hygiénique selon la revendication 2, dans laquelle ledit adhésif comprend de 25 à 65 parties du copolymère A-B et 75 à 35 parties du copolymère A-B-A. 5
4. Une serviette hygiénique selon la revendication 3, dans laquelle ledit adhésif comprend 120 à 140 parties d'une résine visqueuse solide. 10
5. Une serviette hygiénique selon la revendication 1, dans laquelle ledit film polymère perforé comprend un film de polyoléfine. 15
6. Une serviette hygiénique selon la revendication 5, dans laquelle ledit film de polyoléfine est sélectionné à partir du groupe comprenant le polypropylène, le polyéthylène et le film bi-composant polyéthylène/acétate vinylique d'éthylène. 20
7. Une serviette hygiénique selon la revendication 1, dans laquelle ledit film perforé a une épaisseur allant de 0,0254 à 0,762 mm (1 à 30 mils) et une zone ouverte de 30 à 60 %. 25
8. Une serviette hygiénique selon la revendication 7, dans laquelle ledit film a une épaisseur allant de 0,0762 à 0,254 mm (3 à 10 mils). 30
9. Une serviette hygiénique selon la revendication 8, dans laquelle ledit film est un film coextrudé de polyéthylène et d'acétate vinylique d'éthylène ayant une masse de 33,91 g/m² (1 once par yard carré). 35
10. Une serviette hygiénique selon la revendication 1, dans laquelle l'adhésif a substantiellement la formulation suivante : 40
 - 100 parties de Kraton 1117 (marque déposée)
 - 120 parties de Wingtack Plus (marque déposée)
 - 2 parties de Butyl Zimate (marque déposée)
 - 1 partie de Santovar A (marque déposée).

45

50

55