CATAMENIAL TAMПON AND WRAPPER THEREFOR

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ABSTRACT

A compressed catamenial tampon designed for digital insertion. The tampon is centered on a protective wrapper which is gathered and folded around the tampon to completely enclose it. The gathered wrapper is closed near the top of the tampon with an easily removable closure means. A central portion of the wrapper is releasably fastened to the base of the tampon.

10 Claims, 5 Drawing Figures
CATAMENIAL TAMPON AND WRAPPER THEREFOR

BACKGROUND OF THE INVENTION

Digital insertion tampons for catamenial use, in which the tampon is enclosed in a dual-purpose protective wrapper, are old in the art. A recent embodiment is shown in U. S. Pat. No. 3,135,262. However, one of the problems encountered in the use of such tampons is that because the tampon body is so small it has been found difficult to handle during the unwrapping process. As a result the tampon often inadvertently slips from the user's grasp and is dropped, whereupon it must be discarded. Also, after the tampon is partially unwrapped preparatory to insertion, difficulties have been encountered in trying to use the wrapper for its intended purpose of protecting the fingers against soilage. The instant invention is designed primarily to overcome these difficulties.

Accordingly it is the principal object of this invention to provide a digital insertion tampon in which the protective wrapper and tampon body are releasably attached to each other.

Another object is to provide a digital insertion tampon in a conveniently opened package wherein the wrapper serves as a sanitary and hygienic finger protecting device.

SUMMARY OF THE INVENTION

The digital insertion tampon device of this invention comprises a tampon of absorbent material compressed into a self-sustaining, generally cylindrical body with a withdrawal string depending from its lower end and having its upper end tapered and rounded. The tampon is enclosed in a temporary protective wrapper of flexible, fluid-impervious sheet material of generally rectangular shape, preferably square. The lower end of the tampon is releasably fastened to the approximate geometric center of the wrapper sheet and the sheet is gathered and folded upward to completely enclose the tampon, and is held together with an easily removed closure means disposed around the gathered wrapper immediately above the upper end of the tampon. The withdrawal string is also folded upward with the wrapper sheet, but extends beyond the gathered ends. The closure means preferably is a heat sealable tape, or a tape of the cohesive type which sticks only to itself, whereby it will not damage the wrapper upon removal. The wrapper sheet preferably is thermoplastic at least on its inner surface so that it may be attached to the tampon by heat bonding; although other attachment means may be used.

To prepare the tampon for insertion, the wrapped device is grasped at its base by the fingers of one hand and the closure means removed. The corners of the wrapper are then folded back to expose the forward end of the tampon. The withdrawal string is also pulled back along with the wrapper. The tampon is then inserted with one of the fingers while holding onto the wrapper with the others. After the tampon is in place, a gentle tug on the wrapper will separate the wrapper from its weak attachment to the tampon base.

It will be seen that because the tampon is attached to the wrapper sheet, the tampon will not inadvertently fall out or be dropped during the unwrapping procedure as long as one has a grip on the wrapper. The attachment also permits more positive control of the tampon during insertion.

The abovementioned, and other advantages, objects and features attendant the improved device of this invention will become apparent by reference to the following specification and accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

In the drawing, in which like numbers represent like parts: FIG. 1 illustrates the relative position of tampon and wrapper before wrapping.

FIG. 2 shows the tampon partially wrapped.

FIG. 3 illustrates the completely wrapped tampon, and also illustrates a means for attaching the wrapper to the base of the tampon by a heat-sealing step.
A suitable dimension for the wrapper sheet to be used with the above-described tampon is a 6½ inches square. A 1 mil polyethylene sheet along, or a 0.5 to 0.75 mil polyethylene sheet laminated to a single ply, 9 lb. drier basis weight, creped cellulose wadding sheet makes a suitable wrapper. The polyethylene may be clear or opaque and may be colored or plain. It may also be embossed to give it an aesthetically more appealing feel and appearance.

A closure tape of the type illustrated is approximately 2 inches long by three-sixteenth inches wide. It is preferred that the tape be of a type which adheres only to itself and not the wrapper. Tape with a cohesive, rather than adhesive, bond coating will serve this purpose, as well as tape which can be heat-sealed or otherwise bonded. Whichever is used, it should be readily frangible, or peelable, so that it can be removed without damaging the wrapper. The tape may be convolutely wound with a loose tab end, or be a single loop with the ends pressed together to form a tab.

Other types of easily removed closures can also be used, including such things as flexible plastic clips, paper or plastic twist tapes with soft metal cores, or rubber bands with finger tabs.

It is understood that the invention is not limited specifically to the preferred embodiments set forth above, and that suitable changes, modifications, and variations may be made without departing from the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

1. A catamenial tampon device designed for digital insertion and comprising a compressed tampon body, a withdrawal string depending therefrom and a flexible wrapper therefor, said tampon body comprising absorbent material compressed into a self-sustaining substantially cylindrical shape; said wrapper comprising a rectangular sheet of flexible, fluid-im pervious material; the bottom of said tampon body being releasably fastened to the approximate geometric center of said sheet; the attachment strength of said sheet to said tampon is such that no more than a 100 gram pull is required to separate said sheet from said tampon, said sheet being gathered and folded upward to surround and fully enclose said tampon body; said string being folded upward inside said sheet and extending beyond the gathered ends of said sheet; and removable closure means encircling the gathered portion of said wrapper immediately above the top end of said tampon.

2. The tampon device of claim 1 in which at least the inner surface of said sheet is thermoplastic and is attached to said tampon by a heat bond.

3. The tampon device of claim 2 in which said sheet comprises thin polyethylene film.

4. The tampon device of claim 3 in which said sheet comprises a polyethylene-tissue laminate with the polyethylene comprising the inner surface.

5. The tampon device of claim 1 in which the forward end of said tampon is treated with a lubricant.

6. The tampon device of claim 1 in which at least the front half of said tampon is tapered to a narrower diameter than the rear portion.

7. The tampon device of claim 1 in which said closure means comprises an encircling tape having a loose tab end.

8. The tampon device of claim 7 in which the tape comprises a single loop with the ends thereof bonded to each other by a cohesive material coated on the interior surface of said tape.

9. The tampon device of claim 7 in which the tape comprises a single loop with the ends thereof bonded to each other by heat-sealable means.

10. The tampon device of claim 7 in which said tape is readily frangible.