SHAKER-TYPE DISPENSING PACKAGE

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ABSTRACT OF THE DISCLOSURE

A shaker-type package for dispensing granular or powdered material. The package is formed of two opposed paper layers sealed around their periphery and includes a plurality of spaced inner sealed areas which are also spaced from one edge seal. A series of slits extend across the package in the space between the edge seal and inner seal. When the package is torn along the slits, the fibers between the slits interlock.

This invention relates to unit serving packages and is particularly directed to a novel shaker-type package for dispensing granular or powdered condiments, such as salt, pepper and the like.

In the past, several different types of disposable packages have been proposed for dispensing powdered or granular condiments, such as salt and pepper. One highly desirable feature of such type of package is that it should produce a shaker or sprinkler effect by means of which the condiments can be distributed over food. Previous efforts to provide a package of this type have resulted in pleated or fluted packages or packages including a number of spaced sealed areas effective to define one or more spout-like openings. These packages have all been subject to one or more objectionable defects. For example, some of these packages do not dispense the condiment in a dispersed stream, but rather cause it to be poured in a concentrated area, resulting in objectionable accumulation of seasoning. Others have been relatively bulky or expensive to manufacture.

The principal object of the present invention is to provide a new and improved shaker-type package which is not subject to these shortcomings and has substantial advantages over any of the packages previously proposed.

More particularly, one important object of the present invention is to provide a sprinkler-type package having an improved dispensing action by means of which the condiments can be more uniformly spread over food without objectionable accumulations.

Another object of the present invention is to provide a flat package without flutes or the like. One advantage of such a package is that it is extremely compact. Moreover, the sides of such a package can be printed with various types of advertising which can easily be read by the user.

A still further object of the present invention is to provide a package which is extremely economical to produce and which can be fabricated upon high speed packaging equipment.

More specifically, a package constructed in accordance with the present invention is formed from lightweight, flexible paper. The periphery of the package is sealed and the opposite flat walls of the package are also joined together in interior areas spaced from one edge. The package is further provided with a perforated line consisting of spaced slits extending parallel to the package edge in the area between the sealed edge and the interior sealed areas. The sealed areas and sealed edge portion of the package cooperate to hold the walls together in this area so that the slits do not open and the package contents do not leak.

The package is opened by tearing along the slits to remove an edge strip of the package. Even after the strip has been removed, however, the two opposing wall portions adjacent the tear line are held closely together by the interior sealed areas of the package and also, in many cases, by the interlocking of fibers along the torn edges. As a result, when the package is inverted and shaken, the material escapes slowly through the very narrow constructed slit-like space between the sheets. In practice, condiments are distributed in substantially the same uniform manner as with conventional salt and pepper shakers.

It is another object of the present invention which is to provide a package which, when opened by even the most casual user, is torn in a manner to provide this optimum sprinkling action. More particularly, in the preferred form of package of the present invention the two end slits respectively extend through the opposite side edges of the package. Consequently, when a person starts to pull the rear strip from either side, the package automatically starts to tear and continues to tear along the line of slits. The pouring opening is thus maintained in close proximity to the interior sealed areas which hold the walls together restricting the escape of the packaged material.

These and other objects and advantages of the present invention will be more readily apparent from the following detailed description of the drawings illustrating a preferred embodiment of the invention.

In the drawings:

FIGURE 1 is an elevational view of a dispensing package constructed in accordance with the present invention.
FIGURE 2 is a cross sectional view taken along line 2—2 of FIGURE 1.
FIGURE 3 is an elevational view similar to FIGURE 1 with a portion of the package being broken away to show details of construction.
FIGURE 4 is a partial elevational view of a package being opened.
FIGURE 5 is an elevational view showing a package with its top removed.
FIGURE 6 is a greatly enlarged, side elevational view of the package with its top removed.

The overall construction of one preferred form of package 10 embodying the present invention is best shown in FIGURES 1 and 3. As there shown, the package is of generally rectangular outline configuration and is formed of a single sheet of folded, polyethylene coated, paper stock. One preferred paper is a paper which weighs twenty-one pounds per ream and which is coated on one side with polyethylene in the amount of five pounds per ream. The package is formed by overfolding the sheet along a longitudinal edge 11 to form two opposing side walls. The remaining three edges of the package, i.e., top edge 12, side edge 13 and bottom edge 14, are closed by heat sealing the opposed polyethylene surfaces along a band of appreciable width; for example, one-fourth of an inch.

The upper edge of the package is also provided with two spaced interior sealed areas 15 and 16. In one preferred package, these interior sealed areas are formed by heat sealing the opposed polyethylene surfaces of the paper by means of pins one-sixteenth of an inch in diameter. The sealed areas 15 and 16 are preferably equally spaced from one another and from the fold line 11 and the inner edge 17 of edge seal 13.

The package further includes a line of perforations 18 which extends across the upper portion of the package parallel to the upper edge 12 intermediate the sealed areas 15 and 16 and the inner edge 20 of sealed strip portion 12. These perforations or slits are preferably formed by sharp, linear perforating knives. In one preferred
ferred package, the slits 21 are one-eighth of an inch long and the uncut webs 22 between the slits are of a lesser length; for example, one-sixteenth of an inch. As best shown in FIGURES 3, 4 and 6, one slit 21 extends through fold line 11 on the right-hand edge of the package and a second slit 21 extends through the edge 13 on the left-hand edge of the package. This greatly facilitates tearing strip 23 from the upper edge of the package to convert it to a dispenser in the manner shown in FIGURE 4.

The complete package, as shown in FIGURES 1, 2 and 3, is adapted to be filled with any particulate material 24, especially a condiment, such as salt, pepper, sugar or the like. Even after the package is filled, opposing walls 25 and 26 of the package retain a substantially flat configuration, it being understood that the thickness of the package is somewhat exaggerated in FIGURE 2 for the purpose of illustration. Thus, these side walls can be printed and the advertisement, or the like, readily read by the user.

It will also be noted that in the area of perforate line 18, the side walls 25 and 26 of the package are disposed closely adjacent one another and are practically in facial contact. The side walls are held together below the line of perforations on one side wall and above the line of perforations on the other side wall in a line on top of the package. Thus, there is no tendency of the side walls to bulge in the areas of perforations 18 and no appreciable amount of material gathers between the side walls near the slits. The slits 21 remain closed and substantially imperious to the escape of the package contents. As a result, the present package can be shipped and stored in a folded condition with practically no leakage of the contents.

In use, the user grasps the package and begins to tear the uppermost strip 23 beginning with the slit extending through fold line 11, and above the line of perforations 18 and 13 of the package. These slits 21 assure that the strip tears along the line of perforations 18 shown in FIGURES 4 and 6. When the strip has been completely torn, it is discarded and the package is ready to be used as a dispenser. At this time, the two side walls 25 and 26 of the package in the area of the line of perforations 18 still remain in substantially facial contact with one another, being held together by the interior sealed areas 15 and 16 which are still intact. There is only a very narrow discharge slit between the opposed walls. Moreover, in some cases the irregularly torn edges 27 in the areas between slits 21 on one side wall interlock with adjacent fibers on the other side wall to further hold the opposing side walls of the package together and to restrict the discharge opening now formed along the line of perforations 18.

As a result, when the package user inverts the package 10 and shakes it, the condiments are slowly discharged in somewhat of a curtain effect, as shown in FIGURE 5, in which they are distributed in a relatively uniform manner over the food to which they are being applied. As an example of the effectiveness of the shaker feature of the present package, one package selected at random required over one hundred shakes to discharge the two hundred and fifty milligrams of pepper contained in the package. The pepper was quite evenly distributed over the area to which it was applied.

From the above disclosure of the general principles of the present invention and the foregoing description of a preferred embodiment, those skilled in the art will readily comprehend various modifications to which the invention is susceptible. Accordingly, we desire to be limited only by the scope of the following claims.

Having described our invention, we claim:

1. A shaker-type dispensing package for granular condiments or the like, said package being of generally rectangular outline configuration and including two flat opposed walls formed of thin flexible paper, the opposed walls of said package being joined together to form a seal around the periphery of said package, the seal along at least one edge comprising a sealed band of appreciable width, said walls also being joined together at a plurality of interior sealed areas spaced from but closely adjacent to the sealed band along a line extending parallel to said sealed band, said package having an unsealed portion intermediate said sealed band and said interior sealed areas, and a line of spaced slits formed in both walls of said material, said line of spaced slits extending between two opposite edges of said package in the unsealed portion thereof intermediate said sealed band and said interior sealed areas and parallel to the adjacent edge of said package, said two opposed paper walls having irregular fibers along the line of slits intermediate the slits, the fibers tending to interlock when said package is torn along said line of slits.

2. The package of claim 1 in which the two endmost of said slits respectively extend through the opposed edges of said package.

3. The package of claim 1 in which said internal sealed areas are equally spaced from each other and from the seals along said opposite edges of said package.

4. A shaker-type dispensing package for granular condiments or the like, said package being of generally rectangular outline configuration and including a single sheet of thin flexible paper, said paper being coated on one side with a polyethylene coating, said sheet being folded along one edge of said package with the polyethylene surfaces facing one another, said overfolded sheet forming two opposite walls, said walls being joined together by continuous sealed peripheral bands formed along the remaining three edges of said package, a plurality of interior sealed areas spaced from but closely adjacent to one of said sealed bands, said package having an unsealed portion intermediate said last named sealed band and said internal sealed areas, a line of spaced slits formed in both walls of said package in the unsealed portion thereof, said line of spaced slits extending parallel to one edge of said package and being disposed between said interior sealed areas and said adjacent sealed band, said sealed areas and said adjacent sealed band being effective to hold said opposed walls of said package in the periphery of said slits closely adjacent to one another, and said interior sealed areas remaining effective to hold the adjacent walls of said package closely adjacent to one another after said package has been torn along the line of perforations, whereby a narrow discharge opening is formed between the opposed walls of said package, said two opposed paper walls having irregular fibers along the line of slits intermediate the slits, the fibers tending to interlock when sadi package is torn along said line of slits.

5. The package of claim 4 in which the two endmost of said slits respectively extend through the opposed edges of said package.

6. The package of claim 4 in which two interior sealed areas are provided, the sealed areas being equally spaced from each other and from the folded edge and the sealed band along the opposite side edge of said package.

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