This invention relates to a packaged insect repellent wherein a block-shaped body in the form of a sharp-cornered prism is encased in a skin of tearable, air-impermeable material that is wrapped therewith to seal the same, with the encased block being packaged in an inexpensive, disposable hollow box of semi-rigid material (such as paperboard), with the box having exposure openings in the side faces thereof through which the corners of the body project for selective removal of portions of the enclosing skin.

One of the principal objects of the invention is to provide a functional packaging arrangement for insect-repellent blocks wherein the package protects the item during handling, shipping, display, and actual use thereof and provides for convenient selective exposure of the block surface to permit the rate of vaporization thereof to be adapted to the particular conditions of use.

Another object is to provide a box having a distinctively shaped display tab integral therewith which also serves as a convenient hanger for suspending the block, if conditions require.

Another object is to provide such an arrangement wherein the packaging box is of inexpensive construction, permitting disposal thereof after the block is consumed.

Still another object is to provide a packaging arrangement wherein the block is slightly smaller than the box and the box includes one or more closure flaps hingedly carried integrally thereon for accommodating insertion and rotation of the block to expose the corner portions thereof.

A further object is to provide such an arrangement wherein the block is in the form of a plurality of stacked disks that are individually removable for separate use.

Other objects and advantages will become apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same:

Fig. 1 is a perspective view of the insect-repellent package of the present invention;

Fig. 2 is a side-sectional view in enlarged scale and taken on the line 2—2 of Fig. 1; and

Fig. 3 is a sectional view through the block and box, as taken on the line 3—3 of Fig. 2, illustrating selected surfaces of the block exposed for contact with the atmosphere.

Referring now to the drawings, for purposes of disclosure, the block of vaporizable insecticide, which may be of material such as paradichlorobenzene, is shown in the form of a right quadrilateral prism 10 wrapped in an air-tight skin 11 of tearable, air-impermeable, transparent paper-like material such as Parafilm. As will be apparent from an inspection of Fig. 1, the skin is wrapped flat across the upper and lower end faces of the block with the projecting ends of the skin, as shown at 11E, folded flat across opposite side faces of the block in a familiar manner.

According to the invention, the block is housed in a hollow, thin-walled packaging box 12 that forms a chamber having the shape of a right quadrilateral prism, with this chamber corresponding generally to the shape of the block 10 but, as shown, being slightly larger to accommodate insertion and rotation of the block in a preformed box. The box includes opposing integral closure flaps 12C terminating in hinged anchoring ears 12A with the closure flaps forming hinged extensions at opposite lateral edges of the lower end wall 12L of the box and cooperating with the usual pairs of internal flaps 12F which are integral hinged extensions of the opposite lateral edges of the front and rear walls 12F and 12R, respectively. An integral upstanding combination display tab and suspension hanger 12T projects from the upper rear edge of the box. The display tab 12T provides an enlarged, distinctively shaped surface for descriptive sales material and may be provided with a suitable opening 14 for suspending the box from any convenient hook or other similar supporting member.

As is apparent from Fig. 2, the box is formed by suitably folding over an elongated strip to bring together, in overlying engagement, the opposite end portions thereof and provide a double-walled tab 12T with the successive intermediate wall sections of the strip (designated, respectively, as the upper end wall 12U, the front wall 12F, the lower end wall 12L, and the rear side wall 12R) forming the walls of the box.

The sides of the box comprising the closure flaps 12C and wall sections 12F and 12R are each provided with a vertically extending exposure opening 13 which extends substantially the entire height of the side walls for receiving the corner portions of the block.

The block 10 is inserted in the box through one of the openings formed by folding out the closure flaps 12C. During insertion, the sides of the block are positioned to extend parallel to the corresponding sides of the box, and after the block enters the box it is then rotated approximately forty-five degrees relative to the box, in the case of the illustrated arrangement, to bring the corner portions of the block into registry with the openings 13 in the side walls of the box. The slightly larger size of the box provides the necessary clearance to accommodate this rotation while simultaneously permitting the corners of the block to project through the openings 13 sufficiently to permit ready removal of portions of the encasing skin 11 for selectively exposing the corner surfaces of the block.

This packaging arrangement adequately protects the block during handling, shipping, display, and actual use but, more importantly, it facilitates selective exposure of the surface of the block for controlling its rate of vaporization. In certain instances, the block will be applied in relatively small enclosures, in which case it is wasteful and actually unsuitable to expose the entire surface area of the block. In other instances, it may be necessary to actually expose the entire block, in which case the whole skin may be removed.

Preferably circular openings 15 are provided in the end faces 12U and 12L of the box to provide additional exposure surface areas for selective exposure. In this connection the box may include a central passage 10P in registry with the openings 15, and the entire inside surface area bounding the passages 10P is exposed by piercing the upper face of the skin 11. If both the upper and lower faces of the skin are pierced, circulation through the passage 10P is improved and a greater rate of vaporization achieved.

In the illustrated arrangement, the block 10 is shown in the form of an aligned stack of disks 10D having registering central openings therethrough to form the passage 10P. This stacked disk arrangement accommodates the removal...
of one of the disks from its packaged location for separate use. In such instances, the central openings in the disk form convenient mounting facilities for telescoping the disk over another suitable support.

In one constructional embodiment of the invention, the end faces of the box and block, respectively, are 2½" square and 2¾" square while the side faces, respectively, are 2" high and 1½" high. In this particular arrangement, the openings are ¾" wide and 1¾" high.

It should be understood that the description of the preferred form of the invention is for the purpose of complying with Section 112, Title 35, of the U.S. Code and that the claims should be construed as broadly as prior art will permit.

In the specification and claims, when using the terms "block" and "disk" in referring to the elements 10 and 10D, respectively, such terms are to be understood to encompass sharp-cornered shapes other than square or rectangular cross-sectional shapes. For example, these elements may be polygonal in cross section or may be circular or oval and provided with sharp projections at spaced points about their periphery.

I claim:

1. A packaged insect repellent comprising a block of vaporizable material including an encasing skin of tearable air-impervious material wrapped thereabout and sealing the same and a disposable packaging box of semi-rigid material like paperboard formed with a plurality of window-like openings at spaced points thereabout, said box defining a chamber for housing said block with portions of said block projecting through said openings for selective exposure to the atmosphere upon removal of the portions of said skin overlying the same.

2. A packaged insect repellent comprising a block-shaped body of vaporizable material having sharp corners and including an encasing skin of tearable air-impervious material wrapped thereabout and sealing the same and a disposable packaging box of semi-rigid material like paperboard formed with a plurality of window-like openings at spaced points thereabout, said box defining a chamber for housing said body with the corners thereof projecting through said openings for selective exposure to the atmosphere upon removal of the portions of said skin overlying the same.

3. A packaged insect repellent comprising a hollow packaging box of semi-rigid material defining a chamber in the form of a right prism, said box having openings centrally and extending substantially the entire height of the side faces thereof, and a block of vaporizable material having a size and shape substantially corresponding to that of said chamber disposed in said box in angularly offset relation thereto to project through said openings, said block having an encasing skin of tearable air-impervious material wrapped thereabout and sealing the same.

4. A packaged insect repellent comprising a block-shaped body of vaporizable material in the form of a right quadrilateral prism and including an encasing skin of tearable air-impervious material wrapped thereabout and sealing the same, said box having a central passage opening through the end faces thereof, and a hollow packaging box of semi-rigid material defining a chamber in the form of a right quadrilateral prism corresponding to and slightly larger than said box, said box having openings centrally and extending substantially the entire height of the side faces thereof, said box housing said body, with the corresponding side faces thereof defining dihedral angles on the order of 45° so that portions of said body project through the openings in the side faces of the box and so that the openings in the side faces of the box are registerable with the end faces of the body passage.

5. The arrangement of claim 4 wherein said box includes an integral upstanding support-and-display tab having an internal opening therethrough for receiving a suitable support.

6. A packaged insect repellent comprising a hollow packaging box of semi-rigid material defining a chamber in the form of a right quadrilateral prism, said box having openings centrally and extending substantially the entire height of the side faces thereof, with one set of the opposing side faces thereof being provided by integral flaps hingedly connected along opposite edges of one of the end faces of the box, and a block of vaporizable material in the form of a right quadrilateral prism corresponding in shape but slightly smaller in size than said chamber disposed in said box in angularly offset relation thereto such that corresponding side faces of the block and box define dihedral angles on the order of 45 degrees so that portions of said block project through the openings in the side faces of the box, said block having an encasing skin of tearable air-impervious material wrapped thereabout and sealing the same.

7. A packaged insect repellent comprising a block-shaped body of vaporizable material having sharp corners and including an encasing skin of tearable air-impervious material wrapped thereabout and sealing the same and providing manually engageable external folds at the corner regions thereof, and a disposable packaging box of semi-rigid material like paperboard formed with a plurality of window-like openings at spaced points thereabout, said box defining a chamber housing said body with the corners thereof projecting through said openings to allow manual engagement of the external folds for selectively exposing said corners to the atmosphere by removing the portions of said skin overlying the same.

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