

[54] TOILET OIL BAR
[75] Inventor: Leonard Mackles, New York, N.Y.
[73] Assignee: Bristol-Myers Company, New York, N.Y.
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[58] Field of Search 424/358, 365; 252/153

[56] **References Cited**

UNITED STATES PATENTS			
2,114,370	4/1938	Bickenauser	424/358
2,398,254	4/1946	Rosenthal	424/358
2,751,358	6/1956	Caviet	252/153

3,101,300 8/1963 Siegal et al. 424/358
3,507,806 4/1970 Barker et al. 252/153 X

FOREIGN PATENTS OR APPLICATIONS

708,585 4/1965 Canada 424/158

Primary Examiner—Frederick E. Waddell
Attorney, Agent, or Firm—Irving Holtzman; George A. Mentis; David J. Mugford

[57] **ABSTRACT**

A toilet oil bar or cake adapted to release oil when wet with water. The oil bar is made by solidifying mineral oil with monoethanolamine stearic acid amide; N,N distearoyl ethylenediamine or mixtures thereof. The bar may also contain a non-ionic or anionic emulsifying agent to aid in the release of the oil.

9 Claims, No Drawings

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TOILET OIL BAR

This invention relates to a toilet bar or cake adapted to release oil when wet with water. More particularly, it concerns the incorporation of relatively large amounts of mineral oil in a toilet bar from which the subsequent release of oil can be effected when the bar is wet with warm water and applied to the skin. This will give an oily feel to the skin similar to that obtained from bath oils.

Attempts have been made in the past to add oils to soap bars. These, however, have never been successful in depositing oil on the skin largely because the oil that is so deposited is washed away by the emulsifying action of the soap.

It has now been found that a solid toilet bar or cake may be prepared in which an oil, particularly mineral oil, is incorporated in amounts up to 85% by weight. This is made possible by means of certain amides specified more particularly below. The bar looks and feels like a soap bar, but releases oil as an unstable emulsion when wet with warm water. Though no foam is developed, the white emulsion obtained resembles the lather developed by soap. No matter how the hands or body are rinsed after being rubbed with the mineral oil bar, the oil cannot be removed. The results are similar to those obtained when one uses a bath oil.

The prior art teaches the incorporation of large quantities of mineral oil in cosmetic formulations. However, nothing in this art suggests the use of the amides specified below in solidifying an oil, particularly mineral oil, in a bar as is characteristic of the present invention. Typical of this prior art are the references discussed below.

U.S. Pat. No. 2,085,693 discloses a cold cream preparation having a white mineral oil present in an amount of 54.5% by weight of the total preparation. Other ingredients include white wax, paraffin, white ceresin, borax and 32% water.

U.S. Pat. No. 3,424,849 discloses a bath oil using light or heavy white mineral oil present in percentages as high as 60% for heavy white mineral oil as noted in Formulation 2 and as high as 47% for light white mineral oil as noted in Formulations 1 and 5 in columns 7 and 8. These formulations are noted to differ from other prior art formulations in that they employ octyl dodecanoate in the formulation.

U.S. Pat. No. 3,535,427 discloses a skin moisturizing composition having mineral oil present in a percentage of about 65 to 80% by weight and also includes acetylated lanolin alcohol and isopropyl myristate.

Cosmetic bars are also known in the prior art. These are exemplified by the following references: U.S. Pat. Nos. 1,006,736 to C. Ellis; 2,101,843 to F. Factor et al.; 2,303,932 to B. T. Guild; 2,465,340 to H. Sharlit; 2,900,306 to J. N. Slater; 3,179,596 to R. E. Farrar et al.; and 3,598,746 to T. J. Kaniecki et al. In this group, U.S. Pat. No. 2,900,306 is of interest in that it discloses a deodorant stick using stearic acid and its salts and alkyl amine soaps as detergents and emulsifiers. However, the concept of incorporating large amounts of oil and particularly, mineral oil is not shown in this reference.

In accordance with the present invention, the oil and particularly mineral oil, is solidified by heating the oil with either or mixtures of two amides. The amides are:

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monoethanolamine stearic acid amide or N,N distearoyl ethylenediamine or mixtures thereof.

The quantity of oil that may be incorporated in the bar of the present invention may amount up to 85% by weight based on the total weight of the bar. However, it is preferred that the oil be maintained in the range of from about 70 to 75% by weight based on the total weight of the bar.

The quantity of the amide component that can be employed in formulating the present oil bars may also vary somewhat. Ordinarily, it will comprise between about 5 to 30% by weight based on the total weight of the bar. One or the other amides specified above may be employed alone as the amide component or they may both be used together in varying amounts to constitute the amide components. In a preferred form of this invention, the amide component comprises about 40% by weight of the amide component of the monoethanolamine stearic acid amide and 60% by weight of the amide component of N,N distearoyl ethylenediamine.

To facilitate the transfer of the oil from the bar to the skin and to help emulsify the oil to form a lather-like emulsion, it is advantageous to incorporate a non-ionic or anionic emulsifying agent or mixtures thereof in the bar. By way of illustrating the emulsifying agents of these characters that are useful herein, mention may be made of the following: among the non-ionics: diethanolamine stearic acid amide; sorbitan trioleate (Span 85), polyoxyethylene sorbitan monolaurate (polysorbate 20) (Tween 20), polyoxyethylene sorbitan monooleate (polysorbate 80) (Tween 80); among the anionics: sodium lauryl sulfate; coconut oil fatty acid ester of sodium isethionate (Igepan AC-78); triethanolamine lauryl sulfate; sodium lauroyl lactylate, etc. The quantity of emulsifying agent that may be employed can also vary somewhat. However, when present, the emulsifying agent will ordinarily comprise between about 1 and 10% by weight of the total weight of the bar.

As previously noted, in preparing the oil bars of this invention, the mineral oil, the amide component and if desired, the emulsifying agent are mixed and heated together. The bars are formed as the mixture is cooled in a mold. The bars are hard and firm.

The following Examples are given to further illustrate the present invention. It is understood, however, that the invention is not limited thereto.

EXAMPLE 1

Ingredient	% by Weight
Mineral oil SUP 180-190 SSU Visc.	72.0
Monethanolamine stearic acid amide	8.0
Diethanolamine stearic acid amide	8.0
N,N distearoyl ethylenediamine	11.5
Perfume	0.5

The above mixture is heated together to 110°C to form a homogeneous clear composition. This is then poured into a bar mold and allowed to cool. A hard and firm oil bar is thus obtained from which oil may be released by wetting with warm water and rubbing.

EXAMPLE 2

Ingredient	% by Weight
Mineral oil USP-190 SSU Visc.	72.0

EXAMPLE 2-Continued

Ingredient	% by Weight
Monoethanolamine stearic acid amide	8.0
Diethanolamine stearic acid amide	6.0
N,N distearoyl ethylenediamine	11.5
Sodium lauroyl lactylate	2.0
Perfume	0.5

The same procedure described above in Example 1 is used to form an oil bar.

The perfume is added in the above Examples for organoleptic purposes. It may be dispensed with in which event another 0.5% by weight of the mineral oil is added to the composition.

Although the invention has been described with reference to specific forms thereof, it will be understood that many changes and modifications may be made without departing from the spirit of this invention.

What is claimed is:

1. A solid, hard and firm toilet oil bar having the appearance and feel of a soap bar; said oil bar releasing mineral oil when wet with warm water and applied to the skin, said bar containing mineral oil solidified with an amide component; said mineral oil constituting between about 70 percent to 85% by weight of said bar, and said amide component constituting between about 5 percent to 30% by weight of said bar and being selected from the group consisting of monoethanolamine stearic acid amide, N,N' distearoyl ethylenediamine and mixtures thereof.

2. The oil bar of claim 1 including an emulsifying agent selected from the group consisting of diethanolamine stearic acid amide; sorbitan trioleate, polyoxyethylene (20) sorbitan monolaurate, polyoxyethylene (20) sorbitan monooleate; sodium lauryl sulfate; coconut oil fatty acid ester of sodium isethionate; triethanolamine lauryl sulfate and sodium lauroyl lactylate.

3. The oil bar of to claim 2 wherein said emulsifying agent component comprises from about 1 to about 10% by weight of said bar.

4. The oil bar of to claim 3 wherein said mineral oil comprises from about 70 to about 75% by weight of said bar.

5. The oil bar of to claim 4 in which said amide component comprises monoethanolamine stearic acid amide.

6. The oil bar of to claim 4 wherein said amide component comprises N,N distearoyl ethylenediamine.

7. The oil bar of to claim 4 wherein said amide component comprises a mixture of amides, about 40% by weight of said amide component being monoethanolamine stearic acid amide and about 60% by weight of said amide component being N,N distearoyl ethylenediamine.

8. The oil bar of to claim 7 wherein the emulsifying agent component is diethanolamine stearic acid amide.

9. The oil bar of to claim 7 wherein the emulsifying agent component is a mixture of diethanolamine stearic acid amide and sodium lauroyl lactylate.

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