

[54] COSMETIC COMPOSITION CONTAINING MINERAL OIL

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[63] Continuation-in-part of Ser. No. 644,477, June 8, 1967, abandoned.

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[58] Field of Search 424/73; 252/170, 542, 554, 252/DIG. 8

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[57] ABSTRACT

There is provided a homogeneous, single-phase, clear, liquid, composite solution adapted for application to skin prior to shaving or removal of paint from skin which consists essentially of:

a. 75 to 85% of mineral oil having a viscosity between about 25 to 85 seconds Saybolt, and

b. 15 to 25% of an anhydrous, monohydric, aliphatic alcohol containing from 1 to 4 carbon atoms.

8 Claims, No Drawings

COSMETIC COMPOSITION CONTAINING MINERAL OIL

This application is a continuation-in-part of our co-pending application, Ser. No. 644,477, filed June 8, 1967, now abandoned.

The present invention relates to clear, homogeneous, single-phase, liquid compositions adapted for use as shaving and paint-removal aids. More particularly, it relates to such compositions which consist essentially of the following components in percent by weight:

(a)	Mineral oil having a viscosity range from 25 to 85 seconds Saybolt	75% - 85%
(b)	Anhydrous lower aliphatic monohydric alcohol	15% - 25%
(c)	Emollient	0% - 2%
(d)	Emulsifier	0% - 3%
(e)	Surface-active or wetting agent	0% - 1.0%
(f)	Germicide	0% - 3%
(g)	Perfume	0% - 1%

Since the advent of the straight-edge razor, followed by the safety razor and, more recently, the electric shaver, men and women have experienced significant skin trauma when shaving. To achieve comfortably a closeness of shave of the most tough beard or tenderest of skin has become a universal need. Accordingly, many preparations have been suggested for raising the level of shaving ease, comfort, and speed so as to alleviate skin trauma and to attain a pleasant shaving experience. Unfortunately, known preparations have not been wholly successful. Pre-shave as well as after-shave preparations have been employed in an attempt to reduce skin trauma. Moreover, removal of paint from skin by means of hydrocarbon solvents usually dry out and crack the skin causing trauma. If a liquid composition having a soothing effect on skin can be provided to remove both paint and hair from human skin, such provision would serve a well-known need in the art.

It has been unexpectedly found that a shaving-assisting or paint-removal composition of the present invention functions in a plurality of ways. Upon application, it acts as a complete shaving aid—namely, as the pre-shave preparation, as the shaving preparation per se, and as the after-shave lotion. It also acts to dissolve paint from skin. In its broadest aspects, the composition as above-defined is applied in small quantities as a continuous film to the surface of the skin prior to shaving or paint removal. Need for any other shaving or paint-removal preparation is thereby eliminated.

In accordance with the process of the invention involving wet shaving, the skin is prepared by wetting or washing with cold, lukewarm, or hot water. There is next deposited on the wetted skin a substantially continuous film of a low viscosity, mineral oil composition of the present invention, and then the shaving operation commences by applying a razor to the so-wetted skin. The level of shaving ease, comfort, speed, and closeness of shave has been increased to an extent hitherto unattainable. This is because the simultaneous lubrication of the skin, the hair, and the razor contributes toward the increased comfort level during shaving. Fur-

ther, the number of shaves obtained from a blade used in a razor is significantly increased due to the adherence of the composition of the invention to the edge of the razor blade even after normal water cleansing under a faucet. Usually, from about 20 to 50% additional shaves are obtained employing the procedure of the present invention as compared to the use of ordinary lathering techniques.

Where a total dry shave is preferred, the skin is initially treated with the anhydrous, clear, homogeneous, liquid composition of the invention, absent any prior water application. With the application of an electric shaver thereto, a closeness of shave with attendant comfort, ease, and speed is attained by simultaneously lubricating the skin, hair, and clipper edges of the shaver. In either the dry or wet-shaving method, the skin is subsequently washed with water to remove residual oily feel leaving the skin baby-fresh.

Paint removal from the skin is accomplished by applying the liquid composition of the invention to the area covered by paint, such as hardened oil-base or water-base latex paint. The latter dissolves upon application and is then removed by washing with water, leaving the paint-free area supple and refreshed.

In general, a mineral oil having a viscosity of from about 25 to about 85 seconds Saybolt, and preferably from about 35 to 50 seconds Saybolt, is employed. More viscous mineral oils cannot be easily spread even in the presence of an anhydrous alcohol. Further, they leave a rather oily residue on skin which cannot be easily removed by subsequent washing with water. Additionally, they cause rapid clogging of the electric shaver. Where a less viscous mineral oil is employed, there is formed a discontinuous film so that shaving is not possible without experiencing the difficulties of the prior art practice.

To assist in the deposition of the mineral oil as a film on the skin, there is added to said oil a minor amount of an anhydrous, low-molecular weight, monohydric, aliphatic alcohol of from one to four carbon atoms, such as methanol, ethanol, n-propanol, isopropanol, n-butanol, or t-butanol. It is a good practice to employ of from about 15 to 25% of the anhydrous alcohol in conjunction with from about 75 to about 85% of the mineral oil.

In general, small amounts of any perfume or suitable commercially available surfactant can similarly be employed as adjuvants in spreading the mineral oil over the skin's surface. Illustrative of the surfactants are: dioctyl sodium sulfosuccinate, dodecyl sulfonates, dodecyl benzene sulfonates, and equivalents of the same. Various other additaments can also be incorporated in the shaving-assisting composition if they are desired.

For instance, emollients, such as lanolin, or emulsifiers, such as 2-stearyl-1-(ethyl- β -oxypropionic acid) imidazoline, as well as germicides, such as hexachlorophene, brominated salicylanilines, such as "Diaphene," or long-chain quaternary ammonium compounds, such as benzalkonium chloride, or cooling agents, such as menthol, can all be added in small amounts not to exceed 3%, by weight of each component added as specified hereinabove.

Good results have been obtained when from about 2cc to about 15cc of the overall composition of the invention are spread over the area to be shaved. A larger amount of the liquid composition may be applied, if required, to a surface which paint is to be removed.

The following examples are presented as illustrative of the invention. Any specific enumeration of details contained therein should not be interpreted as a limitation except as indicated in the appended claims. All parts and percentages are by weight.

EXAMPLE 1

A homogeneous, clear, yellow-colored solution consisting of 80 parts of a light-weight, white mineral oil having a viscosity of 40 seconds Saybolt, 17 parts of anhydrous isopropyl alcohol, 2 parts of stearyl-1-(ethyl- β -oxypropionic acid) imidazoline, 0.4 part of dioctyl sodium sulfosuccinate, 1.0 part of lanolin, and 0.2 part of perfume is prepared by admixing the several components. When applied to prior water-rinsed, heavily bearded faces of a panel of men, 15 in number, it is noted that the so-prepared solution spreads evenly. No trauma was unanimously experienced in that shaving with a safety razor was accomplished more closely, comfortably, quickly, and with greater ease with no observable dragging or irritation as compared to conventional shaving soaps or lathers. No residual oily feel was experienced after the faces were water-rinsed.

EXAMPLE 2

Example 1 is repeated in every detail except that the composition consists of 80 parts of said light-weight mineral oil having a viscosity of 40 seconds Saybolt and 20 parts of isopropanol.

Similar results as in Example 1 above are obtained.

EXAMPLE 3

Comparative Example

A non-clear, heterogeneous mixture consisting of 100 parts of paraffin oil having a viscosity of 40 to 600 seconds Saybolt and 50 parts of 90% ethanol is employed as a shaving aid as in Example 1 above.

The mixture did not spread evenly, and trauma is experienced during shaving in that dragging of the razor and resultant irritation are unanimously reported. Washing with water left an oily, uncomfortable feel on the face of each of the panelists.

EXAMPLE 4

Example 3 is repeated in every detail except that the mixture consists of 50 parts of said paraffin oil having a viscosity of 40 to 600 seconds Saybolt and 50 parts of 90% ethanol. This mixture is employed as the shaving aid as in Example 1 above.

As in Example 3, the panel reported that the shaving aid prepared in this example is totally unacceptable in that dragging of the razor and resultant irritation are noted. Further, washing with lukewarm or hot water left an uncomfortable oily residual feel on the faces of the panelists.

EXAMPLE 5

A second panel of fifteen men who shaved with electric shavers had been selected for applying the composition of the invention on their bearded faces which remain substantially dry. Shaving is commenced. When terminated, the panel unanimously reported marked ease, rapidity, and smoothness of shave heretofore unexperienced by each.

EXAMPLE 6

Approximately 30 parts (by volume) of the homogeneous, clear composition of Example 2 above are applied to soft, supple hands which had substantial quantities of hardened oil-base paint covering their surfaces. Within about 30 seconds, the paint dissolved. It is next washed from the hands with warm water.

The hands are now substantially free from paint. Moreover, the skin is as supple and nonirritated as it was before the treatment.

EXAMPLE 7

Repeating Example 6 in every detail except that substantial quantities of hardened water-base or latex paint covered the hands, similar results are attained. The skin is found to be free from occluded paint.

EXAMPLE 8

Employing the comparative compositions of Examples 3 and 4 as a paint-removing composition, the paint was not removed but remained on the skin after repeated washes with water.

In like manner, the anhydrous isopropanol in each of Examples 1, 2, and 5 is replaced by anhydrous methanol, ethanol, or n-butanol with equally attendant good results.

Advantageously, the liquid compositions of the present invention can be applied to skin either as such, or they may be admixed with a suitable propellant exemplified by a halogenated hydrocarbon gas, such as "Freon," or a hydrocarbon gas, such as butane. Thus, the latter mixture can cover the skin rapidly, uniformly, and evenly. Further, small amounts of colloidal silica, alumina, or other thickening agent can be added to the liquid compositions of the present invention and applied to the skin directly so as to prevent dripping.

We claim:

1. A homogeneous, single-phase, clear, liquid, composite solution adapted for application to skin prior to shaving or removal of paint from skin which consists essentially of:

- a. 75 to 85%, by weight of mineral oil having a viscosity between about 25 to 85 seconds Saybolt, and
- b. 15 to 25%, by weight of an anhydrous, monohydric, alkanol selected from the group consisting of methanol, ethanol, n-propanol, isopropanol, n-butanol and t-butanol.

2. The homogeneous, single-phase, clear, composite solution according to claim 1 in which the mineral oil used possesses a viscosity of about 40 seconds Saybolt.

3. The homogeneous, single-phase, clear, composite solution according to claim 1 in which the alcohol is isopropanol.

4. The homogeneous, single-phase, clear, composite solution according to claim 1 in which the alcohol is ethanol.

5. The homogeneous, single-phase, clear, composite solution according to claim 1 in which a small amount up to 1%, by weight of the wetting agent, dioctyl sodium sulfosuccinate, is included.

6. The homogeneous, single-phase, clear, composite solution according to claim 1 in which a small amount up to 3%, by weight of the germicide, hexachlorophene, is included.

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7. The homogeneous, single-phase, clear, composite solution according to claim 1 in which a small amount up to 3%, by weight of the emulsifier, 2-stearyl-1-(ethyl-β-oxypropionic acid) imidazoline, is included.

8. The homogeneous, single-phase, clear, composite 5

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solution according to claim 1 in which are admixed:
a. 80 parts of mineral oil having a viscosity of 40 seconds Saybolt, and
b. 20 parts of isopropanol.

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