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DERMAL LOTION

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This invention relates to dermal preparations, such as cosmetic, protective or medicinal lotions, creams, and the like.

Numerous dermal preparations embody fixed oils, such as olive oil, as the base or film-forming ingredient. Such preparations, however, are not readily distributed over the skin, and cause an objectionable sense of oiliness. Moreover, these oils, being at best only slightly soluble in alcohol, can not be used as the base or film-forming ingredient of alcoholic dermal lotions.

It is the object of this invention to provide dermal preparations—especially alcoholic lotions embodying alcohol-soluble perfume materials and/or medicaments—which spread readily over the skin and form a very thin, soft, pliable film causing no objectionable sense of oiliness.

It has been found that higher fatty acid esters of lower aliphatic monohydric alcohols, and notably ethyl oleate, are excellently suited for use as the base or film-forming ingredient of dermal preparations. Ethyl oleate, for example, is a light-colored, almost odorless, bland, oily substance, which has protective properties similar to those of olive oil and the unique characteristics of solubility in alcohol in all proportions and very low viscosity. Because of its very low viscosity, it spreads readily over the skin, leaving a very thin, almost indiscernible, soft, pliable, oily film causing no objectionable sense of oiliness: being soluble in alcohol, it enables the provision of alcoholic dermal lotions which are especially easily distributed over the skin, much like a toilet water, and leave, on evaporation of the alcohol, a thin, uniform, and protective film of ethyl oleate either alone or in combination with desired medicament and/or cosmetic materials. Moreover, a base of ethyl oleate enables the use of alcohol-soluble perfume materials and/or medicaments for lotions, and, especially in the case of hand lotions, enables desirable modifications by addition of glycerine and/or water without causing separation of the mixture.

The higher fatty acid esters of lower aliphatic mono-hydric alcohols, notably ethyl oleate, can be used as the base or film-forming ingredient of preparations embodying a dermal agent, inter alia, germicidal, fungicidal, emollient, anesthetic, cosmetic, pigmentary or coloring, and ultraviolet-ray-absorbing substances, thus, the invention is applicable to dermal preparations such as the following: lotions, e. g. antiseptic, hand, skin-toning, calamine, and sunburn-preventive lotions; creams, e. g. cold, vanishing, massage, shaving, and lanolin creams; lotions for the treatment of affections of the skin, such as acne, blackheads, athlete's feet, and psoriasis; insect-bite preparations; liquid face powders; and hand-cleansing pastes.

Among the other higher fatty acid esters of lower aliphatic monohydric alcohols used in the practice of this invention are

Ethyl stearate
Methyl laurate
Ethyl laurate
n-Propyl laurate
Butyl laurate
Isobutyl laurate
Ethyl myristate
Butyl myristate
Butyl palmitate
Isopropyl stearate
Ethyl linoleate
Ethyl esters of coconut-oil fatty acids

The following examples are illustrative of the invention, the parts being by weight:

Example 1

A lotion for the treatment of affections of the skin is prepared by dissolving 10 parts of ethyl oleate in 90 parts of alcohol, and adding 2 parts of salicylic acid and 1 part of bergamot oil.

Example 2

An antiseptic lotion is prepared by dissolving 50 parts of ethyl oleate in 150 parts of alcohol, and adding 1 part of phenol, 10 parts of camphor, 2 parts of thymol, 3 parts of eugenol, and 1 part of oil of lavender.

Example 3

A sun burn-preventive lotion is prepared by dissolving 15 parts of ethyl oleate in 85 parts of alcohol and adding 5 parts of menthyl salicylate and 1 part of oil of lavender.

Example 4

A hand lotion is prepared by dissolving 30 parts of ethyl oleate in a mixture of 50 parts of glycerine and 900 parts of alcohol, adding a mixture of 1 part of menthol, 1 part of bergamot oil, and 1 part of oil of lavender, and gradually diluting with 100 parts of water.

Example 5

A cold cream is prepared by adding a solution of 1 part of borax in 43 parts of water to a melted mixture of 120 parts of ethyl oleate, 4 parts of spermaceti, and 30 parts of white beeswax, stir-

ring the mixture until cold, and incorporating a perfume material into the emulsion so formed.

Example 6

A vanishing cream is prepared by adding 100 parts of a 2% aqueous solution of potassium hydroxide to a melted mixture of 20 parts of triple-pressed stearic acid and 10 parts of ethyl oleate, stirring the mixture until cold, and incorporating 1 part of a suitable perfume oil into the emulsion so formed.

Example 7

A lotion for the treatment of skin infections such as athlete's foot is prepared by suitably mixing 3.75 parts of salicylic acid, 7.7 parts of benzoic acid, 0.5 part of phenol, 15 parts of ethyl stearate, 1 part oil of wintergreen, and 73 parts of alcohol.

Example 8

A brushless shaving cream is prepared by pouring 675 grams of a 1.5% aqueous solution of potassium hydroxide into a melted mixture of 300 grams stearic acid and 25 grams of butyl palmitate.

Example 9

An antiseptic lotion is prepared by dissolving 50 parts of isobutyl laurate in 150 parts of alcohol, and adding 1 part of phenol, 10 parts of camphor, 2 parts of thymol, 3 parts of eugenol, and 1 part oil of lavender.

The invention may be variously otherwise embodied, within the scope of the appended claims.

I claim:

1. A dermal lotion essentially comprising a dermal agent and a higher fatty acid ester of a lower aliphatic monohydric alcohol in alcohol solution, and adapted to form a film of the ester in combination with the dermal agent.

2. A dermal lotion essentially comprising a dermal agent and ethyl oleate in alcohol solution, and adapted to form a film of ethyl oleate in combination with the dermal agent.

3. A dermal lotion essentially comprising a medicament and a higher fatty acid ester of a lower aliphatic monohydric alcohol in alcohol solution, and adapted to form a film of the ester in combination with the medicament.

4. A dermal lotion essentially comprising a fungicidal substance and a higher fatty acid ester of a lower aliphatic monohydric alcohol in alcohol solution, and adapted to form a film of the ester in combination with the fungicidal substance.

5. A dermal lotion essentially comprising an ultraviolet-ray-absorbing substance and a higher fatty acid ester of a lower aliphatic monohydric alcohol in alcohol solution, and adapted to form a film of the ester in combination with the ultraviolet-ray-absorbing substance.

6. A dermal lotion essentially comprising glycerine and a higher fatty acid ester of a lower aliphatic monohydric alcohol in alcohol solution, and adapted to form a film of the ester in combination with the glycerine.

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