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(71) Applicant: L'OREAL [FR/FR]; 14, rue Royale, 75008 Paris (FR).

(72) Inventors: LE PAPE, Marina; 188, rue Paul Hochart, BP553, 94152 Chevilly la Rue (FR). PEREZ NOWAK, Virginie; 188, rue Paul Hochart, BP553, 94152 Chevilly la Rue (FR).

(74) Agent: WATTREMEZ, Catherine; L'OREAL-Service DIPI, 9, Rue Pierre Dreyfus, 92110 Clichy (FR).

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(54) Title: AQUEOUS COMPOSITION COMPRISING ALKYLCELLULOSE AND AN AROMATIC HYDROCARBON-BASED OIL AND TREATMENT PROCESS USING SAME

(57) Abstract: A subject of the present invention is a cosmetic composition in the form of an aqueous emulsion comprising: (A) at least 5% by weight of water relative to the weight of the composition; (B) from 1% to 20% by weight, relative to the total weight of the composition of alkylcellulose, the alkyl residue of which comprises between 2 and 6 carbon atoms and preferably between 2 and 3 carbon atoms; (C) at least one non-volatile first oil (C) chosen from silicone oils; (D) at least one hydrocarbon-based non-volatile second oil (D) chosen from esters of a linear or branched, preferably saturated, in particular C₂-C₁₀, diol and of benzoic acid; (E) at least one surfactant, which is preferably hydrocarbon-based. A subject is also a makeup and/or care process consisting in applying said composition to keratin materials, in particular the skin and/or the lips, and preferably the lips.



**AQUEOUS COMPOSITION COMPRISING ALKYLCELLULOSE AND AN
AROMATIC HYDROCARBON-BASED OIL AND TREATMENT PROCESS
USING SAME**

5 The present invention aims to provide aqueous cosmetic compositions comprising alkylcellulose and an aromatic hydrocarbon-based oil, and also a process for making up and/or caring for keratin materials, in particular the lips, using same.

 The compositions targeted according to the invention more specifically comprise aqueous, in particular oil-in-water or water-in-oil, and preferably oil-in-water, emulsions.

10 Compositions for caring for and/or making up the lips comprising aqueous emulsions are much less widespread on the market than anhydrous formulations. However, nevertheless, such liquid compositions comprising, in addition to water, alkylcellulose, more particularly ethylcellulose, and a mixture of non-volatile hydrocarbon-based oil(s) and of non volatile phenyl silicone oil(s) have existed since quite recently.

15 These compositions comprising water have the advantage of using ethylcellulose without requiring the use of large amounts of C₂-C₈ monoalcohols, such as ethanol, as is often the case with anhydrous compositions, and without degradation of the properties of the deposit obtained. These monoalcohols in fact make it possible to dissolve the sufficient amounts of ethylcellulose which contributes to the adhesion of the film resulting from the
20 application of the composition which contains it. However, the evaporation of these monoalcohols, once the composition has been applied, has the drawback of being potentially irritant to the skin and/or the lips, and consequently may prove to be detrimental in the case of repeated use. Moreover, when the presence of these compounds, in particular ethanol, is dispensed with in anhydrous compositions, and is replaced with a non-volatile oil,
25 degradation of comfort with more specifically the appearance of a tacky feeling of the resulting deposit can be observed.

 For this reason, the abovementioned aqueous compositions constitute a definite advantage in the field. It should be noted that, when they are applied, they provide a fresh effect, and are barely or non-tacky, and comfortable, and remain so once deposited. They
30 also make it possible to obtain a homogeneous, sufficiently glossy deposit which has a good wear property, with satisfactory non-transfer properties.

 Despite everything, these compositions can still be improved as regards more particularly migration, in other words the tendency of the composition to migrate towards the fine lines around the lips.

35 There is therefore constantly a search for aqueous liquid compositions, intended for making up and/or caring for the skin or the lips, preferably the lips, which are comfortable and non-tacky and which do not migrate after application.

 The object of the present invention is, precisely, to satisfy these needs.

Thus, a subject of the present invention is a cosmetic composition comprising an emulsion containing:

(A) at least 5% by weight of water relative to the weight of the composition;

(B) from 1% to 20% by weight, relative to the total weight of the composition of alkylcellulose, the alkyl residue of which comprises between 2 and 6 carbon atoms and preferably between 2 and 3 carbon atoms;

(C) at least one non-volatile first oil (C) chosen from silicone oils;

(D) at least one hydrocarbon-based non-volatile second oil (D) chosen from esters of a linear or branched, preferably saturated, in particular C₂-C₁₀, diol and of benzoic acid;

(E) at least one surfactant, which is preferably hydrocarbon-based.

Furthermore, a subject of the present invention is a process for making up and/or caring for keratin materials, such as in particular the skin and/or the lips, preferably the lips, consisting in applying the abovementioned composition.

Thus, the cosmetic composition according to the invention is homogeneous, stable over time, and easy to apply to keratin materials, in particular the skin and/or the lips, preferably the lips, and makes it possible to obtain a light, fresh, fine homogeneous deposit which is barely tacky or non-tacky.

The composition according to the invention also makes it possible to produce a makeup result which matches the precise contours of the lips, and remains so over time, since the composition does not migrate into the wrinkles and fine lines around the lips.

Furthermore, the deposit obtained has good properties in terms of staying power of the colour and/or of non-transfer, and also a satisfactory gloss.

However, other characteristics and advantages of the invention will emerge more clearly on reading the description and the examples that follow.

It should be noted that in the description, unless otherwise indicated, the limits indicated for a range are included in said range.

The expressions "at least one" and "several" are used without distinction.

The expressions "between ... and...", "of between ... and ..." and "ranging from ... to ..." should be understood as meaning limits included, unless otherwise specified.

The temperatures mentioned in the description are shown at atmospheric pressure (1.013×10^5 Pa).

The composition according to the invention is more particularly in liquid form.

The term "liquid" or "fluid" is intended in particular to mean a composition which is not solid at ambient temperature (25°C) and for which it is possible to measure a viscosity.

Such compositions can thus in particular be in liquid, creamy or even pasty form.

Protocol for measuring the viscosity:

The viscosity measurement is generally performed at 25°C, using a Rheomat RM 180 viscometer equipped with a No. 2, 3 or 4 spindle, the measurement being performed after 10 minutes of rotation of the spindle in the composition (after which time stabilization of the viscosity and of the spin speed of the spindle are observed), at a speed of 200 rpm.

5 Preferably, the composition according to the invention may have at 25°C a viscosity of between 0.1 and 25 Pa.s and preferably between 0.2 and 20 Pa.s.

Preferably, the viscosity at 25°C of a composition according to the invention may be between 0.2 and 10 Pa.s.

10 In particular, the viscosity at 25°C of a composition according to the invention may be between 0.1 Pa.s (spindle 2) and 25 Pa.s (spindle 4), preferably between 0.2 Pa.s (spindle 2) and 20 Pa.s (spindle 4) and better still between 0.2 Pa.s (spindle 2) and 10 Pa.s (spindle 4).

Protocol for measuring the stability:

15 In order to check the maintenance of the solid particles in the compositions, centrifugations were performed at ambient temperature. The samples of composition were placed in graduated plastic centrifugation tubes having a conical tip (ref. Corning® 15mL PET Centrifuge Tubes, Rack Packed with Plug Seal Cap, Sterile (Product #430055); approximately 16g of composition) and then in the centrifuge (10 minutes at 450 g (expressed in acceleration units)). The measurement is more particularly carried out 24 hours after the production of the composition.

The centrifugation of the compositions according to the invention for 10 minutes at 450 g (expressed in acceleration units) shows no instability (no phase separation).

25 Advantageously, after a step of centrifugation for 1 hour at 900 g (expressed in acceleration units), no phase separation of the compositions thus treated is observed, or if a phase separation appears, the latter reveals a pellet in the tube which is less than 0.5 cm.

The thermal stability of the compositions of the invention was also checked: no release of oil is observed after 2 months at ambient temperature and at 47°C.

30 Thus, the compositions according to the invention are liquid compositions intended for making up and/or caring for keratin materials, in particular the skin and/or the lips, and better still the lips.

35 These compositions are advantageously in the form of compositions comprising at least one emulsion, preferably an oil-in-water emulsion, or even are compositions advantageously in the form of oil-in-water emulsions.

Preferably, the cosmetic composition according to the invention is a lipstick, in particular a liquid lipstick, or a lip gloss.

ALKYLCELLULOSE

As indicated previously, the composition according to the invention comprises at least alkylcellulose, the alkyl residue of which comprises between 2 and 6 carbon atoms, in particular between 2 and 3 carbon atoms.

According to a particular embodiment, the alkylcellulose defined previously, and preferably ethylcellulose, represents a content ranging from 1% to 20% by weight, relative to the weight of the composition; the weight of ethylcellulose being expressed dry matter.

Preferentially, the composition according to the invention may comprise from 4% to 20% by weight, expressed as alkylcellulose dry matter, more particularly from 4.5% to 15% by weight, expressed as alkylcellulose dry matter, relative to the total weight of said composition.

The alkylcellulose is a cellulose alkyl ether comprising a chain constituted of β -anhydroglucose units bonded together via acetal bonds. Each anhydroglucose unit exhibits three replaceable hydroxyl groups, all or some of these hydroxyl groups being able to react according to the following reaction:

$\text{RONa} + \text{R}'\text{Cl} \rightarrow \text{ROR}' + \text{NaCl}$, where R represents a cellulose radical and R' represents a $\text{C}_2\text{-C}_6$ alkyl radical.

Advantageously, the alkylcellulose may be chosen from ethylcellulose and propylcellulose.

According to a particularly preferred embodiment, the alkylcellulose may be ethylcellulose.

It is a cellulose ethyl ether.

Total substitution of the three hydroxyl groups would lead for each anhydroglucose unit to a degree of substitution of 3, in other words to a content of alkoxy groups of 54.88%.

The ethylcellulose polymers used in a cosmetic composition according to the invention are preferably polymers exhibiting a degree of substitution with ethoxy groups ranging from 2.5 to 2.6 per anhydroglucose unit, in other words comprising a content of ethoxy groups ranging from 44% to 50%.

The alkylcellulose may be used in the form of a powder, for instance the products of the Ethocel Standard range from Dow Chemicals.

According to a preferred mode, the alkylcellulose (preferably ethylcellulose) may be used in a composition of the invention in the form of particles dispersed in an aqueous phase, in particular like a dispersion of latex or pseudolatex type. The techniques for preparing these latex dispersions are well known to those skilled in the art.

The product sold by the company FMC Biopolymer under the name Aquacoat ECD-30, which is constituted of a dispersion of ethylcellulose in a proportion of about 26.2% by weight in water and stabilized with sodium lauryl sulfate and cetyl alcohol, is most particularly suitable for use as an aqueous dispersion of ethylcellulose.

According to a particular embodiment, the aqueous dispersion of ethylcellulose, in particular the product Aquacoat ECD, may be used in a proportion of from 10% to 90% by weight, in particular from 15% to 60% by weight and preferably from 15% to 45% by weight of ethylcellulose dispersion, relative to the total weight of the composition.

PHYSIOLOGICALLY ACCEPTABLE MEDIUM

Besides the compounds indicated previously, the composition according to the invention comprises a physiologically acceptable medium.

The term “physiologically acceptable medium” is intended to denote a medium that is particularly suitable for applying a composition of the invention to keratin materials, in particular the skin and/or the lips.

The physiologically acceptable medium (acceptable tolerance, toxicology and feel) is generally adapted to the nature of the support onto which the composition is to be applied, and also to the form in which the composition is to be conditioned.

NON-VOLATILE SILICONE FIRST OILS (C)

The composition according to the invention thus comprises at least one non-volatile silicone first oil (C).

The term “oil” is intended to mean a water-immiscible, non-aqueous compound.

The term “immiscible” is intended to mean that the mixing of the same amount of water and oil, after stirring, does not result in a stable solution comprising only a single phase, under standard temperature and pressure conditions. Observation is carried out by eye or using a phase contrast microscope, if necessary, on 100 g of mixture obtained after sufficient Rayneri stirring to produce a vortex within the mixture (by way of indication, 200 to 1000 rev/min), the resulting mixture being left standing, in a closed flask, for 24 hours at ambient temperature before observation.

Furthermore, the term “oil” denotes a compound that is liquid at ambient temperature (25°C) and atmospheric pressure (1.013×10^5 Pa).

The term “non-volatile” is intended to mean an oil, the vapour pressure of which at 25°C and atmospheric pressure is non-zero and less than 0.02 mmHg (2.66 Pa) and better still less than 10^{-3} mmHg (0.13 Pa) (closed cup).

In accordance with one advantageous embodiment of the invention, the composition comprises from 5% to 50% by weight of first oil(s), relative to the total weight of the composition, more particularly from 5% 45% by weight, and preferably from 10% to 30% by weight, relative to the total weight of the composition.

The composition according to the invention thus comprises at least one non-volatile silicone oil chosen from non-volatile phenyl or non-phenyl silicone oils.

The term “silicone oil” is intended to mean an oil containing at least one silicon atom and in particular containing Si-O groups.

Non-volatile non-phenyl silicone oils

5 The term “non-phenyl silicone oil” denotes a silicone oil not bearing any phenyl substituents.

Representative examples of these non-volatile non-phenyl silicone oils which may be mentioned comprise polydimethylsiloxanes (INCI name: dimethicone); vinylmethyl methicones; and also silicones modified in particular with aliphatic groups and/or with functional groups such as hydroxyl groups.

In particular, these oils can be chosen from the following non-volatile oils:

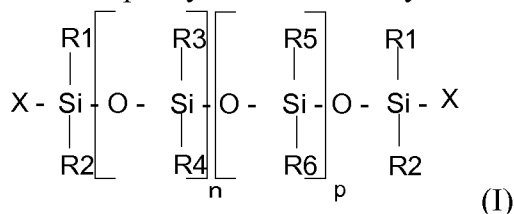
- polydimethylsiloxanes (PDMSs),

15 - PDMSs comprising aliphatic groups, in particular alkyl or alkoxy groups, which are pendent and/or at the end of the silicone chain, these groups each comprising from 2 to 24 carbon atoms. Mention may be made, by way of example, of the cetyl dimethicone sold under the commercial reference Abil Wax 9801 from Evonik Goldschmidt.

These oils can also comprise functional groups such as hydroxyl groups.

In addition, the non-volatile silicone oils do not comprise any oxyalkylene group such as oxyethylene or oxypropylene.

The non-phenyl silicone oil may be chosen in particular from silicones of formula (I):



in which:

25 R₁, R₂, R₅ and R₆ are, together or separately, an alkyl radical containing from 1 to 6 carbon atoms,

R₃ and R₄ are, together or separately, an alkyl radical containing from 1 to 6 carbon atoms, a vinyl radical or a hydroxyl radical,

X is an alkyl radical containing from 1 to 6 carbon atoms or, a hydroxyl radical,

30 n and p are integers chosen so as to have a fluid compound, in particular of which the viscosity at 25°C is between 9 centistokes (cSt) ($9 \times 10^{-6} \text{ m}^2/\text{s}$) and 100 000 cSt.

There may be mentioned, as non-volatile non-phenyl silicone oils that can be used according to the invention, those for which:

- the R₁ to R₆ and X substituents represent a methyl group, and p and n are such that
35 the viscosity is 60 000 cSt, for example the product sold under the name Dow Corning 200

Fluid 60 000 CS by Dow Corning, and the product sold under the name Wacker Belsil DM 60 000 by Wacker,

- the substituents R_1 to R_6 and X represent a methyl group, and p and n are such that the viscosity is either 100 cSt or 350 cSt, for example the products sold respectively under the names Belsil DM100 and Dow Corning 200 Fluid 350 CS by the company Dow Corning,

- the R_1 to R_6 substituents represent a methyl group, the X group represents a hydroxyl group, and n and p are such that the viscosity is 700 cSt, for example the product sold under the name Baysilone Fluid T0.7 by Momentive.

10 **Non-volatile phenyl silicone oils**

The expression "phenyl silicone oil" denotes a silicone oil bearing at least one phenyl substituent.

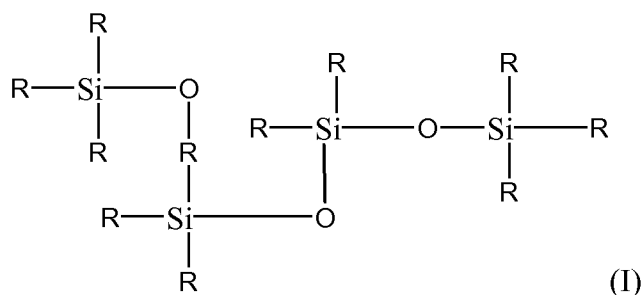
These non-volatile phenyl silicone oils may be chosen from those also bearing at least one dimethicone fragment, or from those not bearing any.

The term "dimethicone fragment" denotes a divalent siloxane group in which the silicon atom bears two methyl radicals, this group not being located at the ends of the molecule. It can be represented by the following formula:



The non-volatile phenyl silicone oil may thus be chosen from:

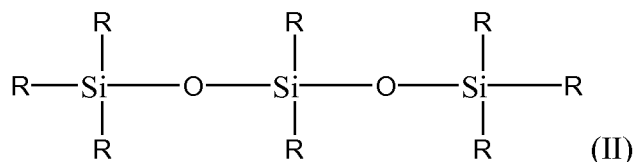
a) phenyl silicone oils optionally bearing a dimethicone fragment corresponding to formula (I) below:



in which the groups R, which are monovalent or divalent, represent, independently of each other, a methyl, methylene, phenyl or phenylene, with the proviso that at least one group R represents a phenyl.

Preferably, in this formula, the phenyl silicone oil comprises at least three phenyl groups, for example at least four, at least five or at least six.

b) phenyl silicone oils optionally bearing a dimethicone fragment corresponding to formula (2) below:



in which the groups R represent, independently of each other, a methyl or a phenyl, with the proviso that at least one group R represents a phenyl.

Preferably, in this formula, the compound of formula (II) comprises at least three phenyl groups, for example at least four or at least five.

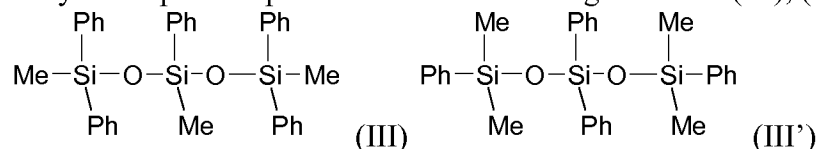
Mixtures of different phenyl silicone compounds described previously may be used.

Examples which may be mentioned comprise mixtures of triphenyl-, tetraphenyl- or pentaphenylorganopolysiloxanes.

Mention may more particularly be made, among the compounds of formula (II), of phenyl silicone oils not having a dimethicone fragment, corresponding to the formula (II) in which at least 4 or at least 5 R radicals represent a phenyl radical, the remaining radicals representing methyls.

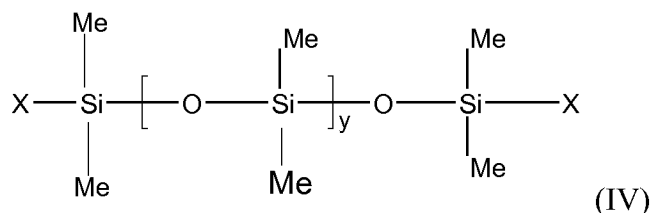
Such non-volatile phenyl silicone oils are preferably trimethylpentaphenyltrisiloxane or tetramethyltetraphenyltrisiloxane. They are in particular sold by Dow Corning under the reference PH-1555 HRI or Dow Corning 555 Cosmetic Fluid (chemical name: 1,3,5-trimethyl-1,1,3,5,5-pentaphenyltrisiloxane; INCI name: trimethylpentaphenyltrisiloxane), or the tetramethyltetraphenyltrisiloxane sold under the reference Dow Corning 554 Cosmetic Fluid ou PH-1554 HRI Cosmetic Fluid by Dow Corning can also be used.

They correspond in particular to the following formulae (III), (III'):



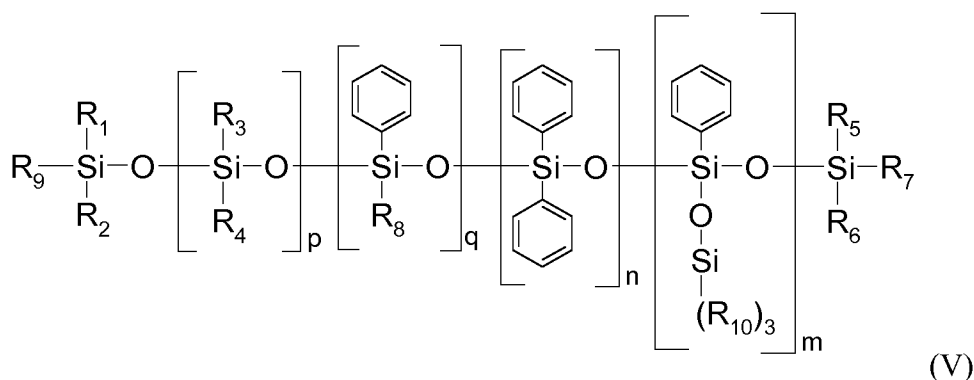
in which Me represents methyl, and Ph represents phenyl.

c) phenyl silicone oils bearing at least one dimethicone fragment corresponding to formula (IV) below:



in which Me represents methyl, y is between 1 and 1000 and X represents $-\text{CH}_2-\text{CH}(\text{CH}_3)(\text{Ph})$.

d) phenyl silicone oils corresponding to formula (V) below, and mixtures thereof:



in which:

- R₁ to R₁₀, independently of one another, are saturated or unsaturated and linear, cyclic or branched C₁-C₃₀ hydrocarbon-based radicals,

5 - m, n, p and q are, independently of each other, integers between 0 and 900, with the proviso that the sum m+n+q is other than 0.

Preferably, the sum m+n+q is between 1 and 100. Advantageously, the sum m+n+p+q is between 1 and 900 and preferably between 1 and 800.

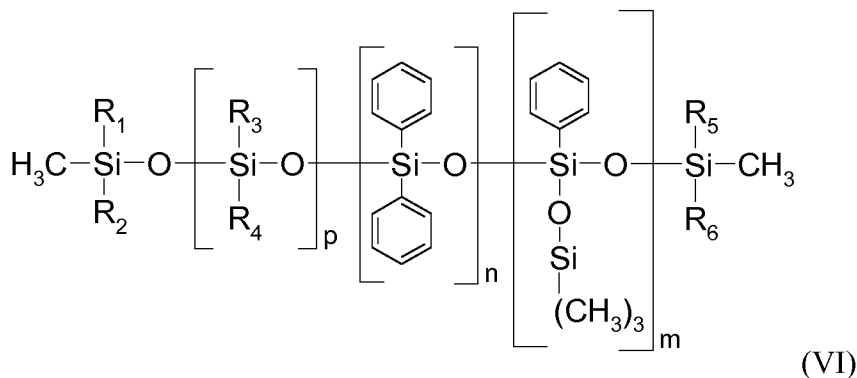
Preferably, q is equal to 0.

10 More particularly, R₁ to R₁₀ represent, independently of one another, a saturated or unsaturated, preferably saturated, and linear or branched C₁-C₃₀ hydrocarbon-based radical, and in particular a preferably saturated C₁-C₂₀, in particular C₁-C₁₈, hydrocarbon-based radical, or a monocyclic or polycyclic C₆-C₁₄ and in particular C₁₀-C₁₃ aryl radical, or an aralkyl radical, the alkyl part of which is preferably a C₁-C₃ alkyl part.

15 Preferably, R₁ to R₁₀ can each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or in an alternative form a phenyl, tolyl, benzyl or phenethyl radical. R₁ to R₁₀ can in particular be identical, and in addition can be a methyl radical.

20 According to a first more particular embodiment of formula (V), mention may be made of:

i) phenyl silicone oils optionally bearing at least one dimethicone fragment corresponding to formula (VI) below, and mixtures thereof:



in which:

- R_1 to R_6 are, independently of one another, saturated or unsaturated and linear, cyclic or branched C_1 - C_{30} hydrocarbon radicals, a preferably C_6 - C_{14} aryl radical or an aralkyl radical, the alkyl part of which is a C_1 - C_3 alkyl part,

5 - m , n and p are, independently of each other, integers between 0 and 100, with the proviso that the sum $n+m$ is between 1 and 100.

Preferably, R_1 to R_6 represent, independently of one another, a C_1 - C_{20} , in particular C_1 - C_{18} , hydrocarbon-based, preferably alkyl, radical, or a C_6 - C_{14} aryl radical which is monocyclic (preferably a C_6 aryl radical) or polycyclic and in particular a C_{10} - C_{13} aryl radical, or an aralkyl radical (preferably the aryl part is a C_6 aryl part; the alkyl part is a C_1 - C_3 alkyl part).

Preferably, R_1 to R_6 can each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or in an alternative form a phenyl, tolyl, benzyl or phenethyl radical.

15 R_1 to R_6 can in particular be identical, and in addition can be a methyl radical. Preferably, $m = 1$ or 2 or 3, and/or $n = 0$ and/or $p = 0$ or 1 may be applied, in formula (VI).

According to a particular embodiment, the non-volatile phenyl silicone oil is chosen from phenyl silicone oils bearing at least one dimethicone fragment.

20 Preferably, such oils correspond to compounds of formula (VI) in which:

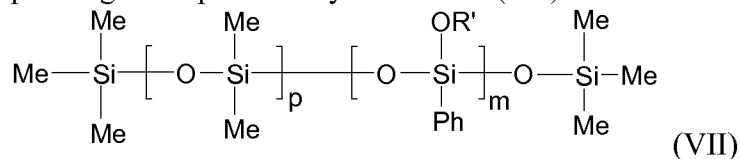
A) $m = 0$ and n and p are, independently of each other, integers between 1 and 100.

Preferably, R_1 to R_6 are methyl radicals.

25 According to this embodiment, the silicone oil is preferably chosen from a diphenyl dimethicone, such as KF-54 from Shin-Etsu (400 cSt), KF-54HV from Shin-Etsu (5000 cSt), KF-50-300CS from Shin-Etsu (300 cSt), KF-53 from Shin-Etsu (175 cSt) or KF-50-100CS from Shin-Etsu (100 cSt).

B) p is between 1 and 100, the sum $n+m$ is between 1 and 100, and $n = 0$.

30 These phenyl silicone oils optionally have at least one dimethicone fragment corresponding more particularly to formula (VII) below:



in which Me is methyl and Ph is phenyl, OR' represents an

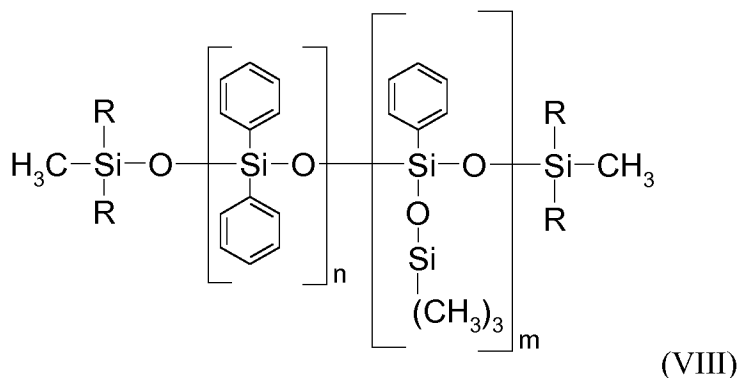
35 - OSiMe_3 group and p is 0 or is between 1 and 1000, and m is between 1 and 1000. In particular, m and p are such that compound (VII) is a non-volatile oil.

According to a first embodiment of non-volatile phenyl silicone bearing at least one dimethicone fragment, p is between 1 and 1000. m is more particularly such that the compound (VII) is a non-volatile oil. Use may be made, for example, of trimethylsiloxyphenyl dimethicone, sold in particular under the reference Belsil PDM 1000 by Wacker.

According to a second embodiment of non-volatile phenyl silicone not bearing a dimethicone fragment, p is equal to 0. m is between 1 and 1000, and in particular is such that the compound (VII) is a non-volatile oil.

Phenyltrimethylsiloxytrisiloxane or phenyl trimethicone, sold in particular under the reference Dow Corning 556 Cosmetic Grade Fluid (DC556), can be used, for example.

ii) non-volatile phenyl silicone oils not bearing a dimethicone fragment corresponding to formula (VIII) below, and mixtures thereof:



in which:

- R, independently of one another, are saturated or unsaturated and linear, cyclic or branched C₁-C₃₀ hydrocarbon radicals, preferably R is a C₁-C₃₀ alkyl radical, a preferably C₆-C₁₄ aryl radical, or an aralkyl radical, the alkyl part of which is a C₁-C₃ alkyl part,

- m and n are, independently of each other, integers between 0 and 100, with the proviso that the sum n+m is between 1 and 100.

Preferably, R represent, independently of one another, a saturated or unsaturated, preferably saturated, and linear or branched C₁-C₃₀ hydrocarbon radical, and in particular a preferably saturated C₁-C₂₀, in particular C₁-C₁₈ and more particularly C₄-C₁₀ hydrocarbon radical, a monocyclic or polycyclic C₆-C₁₄ and in particular C₁₀-C₁₃ aryl radical, or an aralkyl radical, of which preferably the aryl part is a C₆ aryl part and the alkyl part is a C₁-C₃ alkyl part.

Preferably, the R groups can each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or in an alternative form a phenyl, tolyl, benzyl or phenethyl radical.

The radicals R may in particular be identical, and in addition may be a methyl radical.

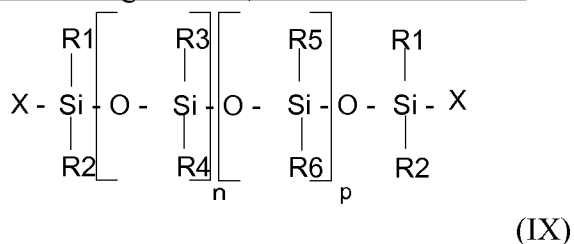
Preferably, $m = 1$ or 2 or 3 , and/or $n = 0$ and/or $p = 0$ or 1 may be applied, in formula (VIII).

According to one preferred embodiment, n is an integer between 0 and 100 and m is an integer between 1 and 100, with the proviso that the sum n+m is between 1 and 100, in formula (VIII). Preferably, R is a methyl radical.

According to one embodiment, a phenyl silicone oil of formula (VIII) with a viscosity at 25°C of between 5 and 1500 mm²/s (i.e. 5 to 1500 cSt), and preferably with a viscosity of between 5 and 1000 mm²/s (i.e. 5 to 1000 cSt), may be used.

10 According to this embodiment, the non-volatile phenyl silicone oil is preferably chosen from phenyl trimethicones (when $n=0$) such as DC556 from Dow Corning (22.5 cSt), or else from diphenylsiloxypheyl trimethicone oil (when m and n are between 1 and 100) such as KF56 A from Shin-Etsu, or the Silbione 70663V30 oil from Rhône-Poulenc (28 cSt). The values in brackets represent the viscosities at 25°C.

15 e) phenyl silicone oils optionally bearing at least one dimethicone fragment corresponding
to the following formula, and mixtures thereof:



in which:

20 R₁, R₂, R₅ and R₆, which are identical or different, are an alkyl radical containing from
1 to 6 carbon atoms.

R₃ and R₄, which are identical or different, are an alkyl radical containing from 1 to 6 carbon atoms or an aryl radical (preferably a C₆-C₁₄ aryl radical), with the proviso that at least one of R₃ and R₄ is a phenyl radical,

25 X is an alkyl radical containing from 1 to 6 carbon atoms, a hydroxyl radical or a vinyl radical,

n and p are integers greater than or equal to 1, chosen so as to give the oil a weight-average molecular mass of less than 200 000 g/mol, preferably less than 150 000 g/mol and more preferably less than 100 000 g/mol.

30 **f)** and a mixture thereof.

In accordance with one particularly advantageous embodiment of the invention, the non-volatile first oil(s) (C) is (are) chosen from non-volatile non-phenyl silicone oils, in particular dimethicones, and from non-volatile phenyl silicones, preferably chosen from

phenyl trimethicones, phenyl dimethicones, diphenylsiloxyphe-
nyl trimethicones, diphenyl
dimethicones, trimethylsiloxyphe-
nyl dimethicones, and mixtures thereof, and preferably
trimethylsiloxyphe-
nyl dimethicones. More particularly, the non-volatile first oil(s) (C) is
(are) chosen from non-volatile phenyl silicone oils, in particular those listed above.

5

AROMATIC NON-VOLATILE HYDROCARBON-BASED SECOND OIL (D)

As indicated above, the composition according to the invention comprises at least one
non-volatile hydrocarbon-based second oil (D) chosen from esters of linear or branched,
10 preferably saturated, in particular C₂-C₁₀, diols and of benzoic acid.

In accordance with one particularly advantageous embodiment of the invention, the
non-volatile hydrocarbon-based second oil is chosen from diesters of a linear or branched,
saturated, C₂-C₁₀, more particularly C₂-C₆, preferably C₃-C₆, diol and of benzoic acid.

More particularly suitable for the implementation of the invention are oils chosen from
15 ethylene glycol dibenzoate, diethylene glycol dibenzoate, propylene glycol dibenzoate,
dipropylene glycol dibenzoate, and mixtures thereof, more particularly propylene glycol
dibenzoate, dipropylene glycol dibenzoate, and mixtures thereof.

Preferably, the content of non-volatile hydrocarbon-based second oil (D) ranges from
5% to 40% by weight and more particularly from 5% to 35% by weight, relative to the total
20 weight of the composition.

ADDITIONAL NON-VOLATILE HYDROCARBON-BASED OILS

The composition according to the invention can also comprise at least one additional
25 non-volatile hydrocarbon-based oil, which is polar, and different from the second oil(s) (D),
or non-polar.

The term "hydrocarbon-based oil" is intended to mean an oil formed essentially of,
indeed even constituted of, carbon and hydrogen atoms, and optionally of oxygen and
nitrogen atoms, and not containing a silicon or fluorine atom.

30 The hydrocarbon-based oil is thus distinct from a silicone oil and a fluorinated oil.

It may contain alcohol, ester, ether, carboxylic acid, amine and/or amide groups.

Additional polar non-volatile hydrocarbon-based oils

Preferably, such oils comprise at least one oxygen atom.

35 They thus contain at least one alcohol, ether or ester function, or even combinations
thereof.

- C₁₀-C₂₆ alcohols, preferably monoalcohols;

More particularly, the C₁₀-C₂₆ alcohols are saturated or unsaturated, and branched or unbranched, and comprise from 10 to 26 carbon atoms.

Advantageously, the C₁₀-C₂₆ alcohols are fatty alcohols, which are preferably branched when they comprise at least 16 carbon atoms.

5 As examples of fatty alcohols that may be used according to the invention, mention may be made of linear or branched fatty alcohols, of synthetic origin or alternatively of natural origin, for instance alcohols derived from plant materials (coconut, palm kernel, palm, etc.) or animal materials (tallow, etc.).

10 Use may also be made of other long-chain alcohols, such as, for example, ether alcohols or alternatively "Guerbet" alcohols.

Finally, use may also be made of certain more or less long fractions of alcohols of natural origin, such as, for example, coconut (C₁₂ to C₁₆) or tallow (C₁₆ to C₁₈).

Use is preferably made of a fatty alcohol comprising from 10 to 24 carbon atoms and more preferably from 12 to 22 carbon atoms.

15 Mention may in particular be made, as specific examples of fatty alcohols which can preferably be used, of lauryl alcohol, isostearyl alcohol, oleyl alcohol, 2-butyloctanol, 2-undecylpentadecanol, 2-hexyldecyl alcohol, isocetyl alcohol, octyldodecanol and mixtures thereof.

20 According to an advantageous embodiment of the invention, the alcohol is chosen from octyldodecanol.

- optionally hydroxylated monoesters, diesters or triesters of a C₂-C₈ monocarboxylic or polycarboxylic acid and of a C₂-C₈ alcohol.

In particular:

25 * optionally hydroxylated monoesters of a C₂-C₈ carboxylic acid and of a C₂-C₈ alcohol,

* optionally hydroxylated diesters of a C₂-C₈ dicarboxylic acid and of a C₂-C₈ alcohol, such as diisopropyl adipate, 2-diethylhexyl adipate, dibutyl adipate, diisostearyl adipate or 2-diethylhexyl succinate,

30 * optionally hydroxylated triesters of a C₂-C₈ tricarboxylic acid and of a C₂-C₈ alcohol, such as citric acid esters, such as trioctyl citrate, triethyl citrate, acetyl tributyl citrate or tributyl citrate.

- esters of a C₂-C₈ polyol and of one or more non-aromatic C₂-C₈ carboxylic acids,

35 such as glycol diesters of monoacids, such as neopentyl glycol diheptanoate, or glycerol triesters of monoacids, such as triacetin.

Preferably, the non-volatile hydrocarbon-based first oil is chosen from C₁₀-C₂₆ alcohols, more particularly monoalcohols, and preferably octyldodecanol.

- additional polar non-volatile ester oils comprising at least 17 carbon atoms

In particular, the additional polar non-volatile ester oils comprise between 17 and 70 carbon atoms and are mono-, di- or triesters. They may or may not also be hydroxylated.

Thus, the non-volatile ester oil that is suitable for use in the invention may be chosen from:

* **monoesters comprising at least 18 carbon atoms**, in particular comprising between 18 and 40 carbon atoms in total, in particular the monoesters of formula R_1COOR_2 in which R_1 represents a saturated or unsaturated, linear or branched or aromatic fatty acid residue comprising from 4 to 40 carbon atoms and R_2 represents a hydrocarbon-based chain, which is in particular branched, containing from 4 to 40 carbon atoms, on the condition that $R_1 + R_2 \geq 18$, for instance Purcellin oil (cetostearyl octanoate), isononyl isononanoate, C_{12} to C_{15} alkyl benzoate, 2-ethylhexyl palmitate, octyldodecyl neopentanoate, 2-octyldodecyl stearate, 2-octyldodecyl erucate, isostearyl isostearate, 2-octyldodecyl benzoate, alcohol or polyalcohol octanoates, decanoates or ricinoleates, isopropyl myristate, isopropyl palmitate, butyl stearate, hexyl laurate, 2-ethylhexyl palmitate, 2-hexyldecyl laurate, 2-octyldecyl palmitate or 2-octyldodecyl myristate.

Preferably, they are esters of formula R_1COOR_2 in which R_1 represents a linear or branched fatty acid residue containing from 4 to 40 carbon atoms and R_2 represents a hydrocarbon-based chain that is in particular branched, containing from 4 to 40 carbon atoms, R_1 and R_2 being such that $R_1 + R_2 \geq 18$.

Even more particularly, the ester comprises between 18 and 40 carbon atoms in total.

Preferred monoesters that may be mentioned include isononyl isononanoate, oleyl erucate and/or 2-octyldodecyl neopentanoate;

* **monoesters of a fatty acid comprising at least 18 carbon atoms**, and in particular containing from 18 to 22 carbon atoms, and of diols. They may in particular be esters of lanolic acid, oleic acid, lauric acid or stearic acid, and of diols, for instance propylene glycol monoisostearate;

* **diesters comprising at least 17 carbon atoms**, which diesters are optionally hydroxylated, linear or branched, saturated, unsaturated or aromatic diesters especially comprising between 17 and 60 carbon atoms in total, in particular between 17 and 50 carbon atoms in total. Use may thus be made more particularly of optionally hydroxylated diesters of dicarboxylic acid and of saturated or unsaturated monoalcohols, such as preferably diisostearyl malate. Use may also be made of diesters of glycol, in particular of C_2 - C_5 , of glycerol or of diglycerol and of linear or branched, saturated, unsaturated or aromatic monocarboxylic acids, such as neopentyl glycol dicaprate, propylene glycol dioctanoate, diethylene glycol diisononanoate, or poly(2-glyceryl) diisostearate (in particular such as the

compound sold under the commercial reference Dermol DGDIS by the company Alzo), polyglyceryl-3 diisostearate;

* **hydroxylated monoesters comprising at least 18 carbon atoms**, preferably with a total carbon number ranging from 18 to 70, for instance isostearyl lactate, octyl hydroxystearate, octyldodecyl hydroxystearate or glyceryl stearate;

* **triesters comprising at least 35 carbon atoms**, in particular comprising between 35 and 70 carbon atoms in total, in particular such as triesters of tricarboxylic acid, such as triisostearyl citrate, or tridecyl trimellitate, or glycol triesters of monocarboxylic acids such as polyglyceryl-2 triisostearate;

* **tetraesters comprising at least 35 carbon atoms**, in particular with a total carbon number ranging from 35 to 70, such as pentaerythritol or polyglycerol tetraesters of a monocarboxylic acid, for instance pentaerythrityl tetrapelargonate, pentaerythrityl tetraisostearate, pentaerythrityl tetraisononanoate, glyceryl tris(2-decyl)tetradecanoate, poly(2-glyceryl) tetraisostearate or else pentaerythrityl tetrakis(2-decyl)tetradecanoate;

* **Polyesters obtained by condensation of dimer and/or trimer of unsaturated fatty acid and of diol**, such as those described in Patent Application FR 0 853 634, such as in particular dilinoleic acid and 1,4-butanediol. Mention may in particular be made on this account of the polymer sold by Biosynthis under the name Viscoplast 14436H (INCI name: dilinoleic acid/butanediol copolymer) or else copolymers of polyols and of diacid dimers, and their esters, such as Hailucent ISDA. Mention may also be made of polyesters obtained from hexanedioic, isostearic, capric or caprylic acids and from pentaerythritol (for example Supermol L from Croda; INCI name: Pentaerythrityl Isostearate / Caprate / Caprylate / Adipate).

* **esters and polyesters of diol dimer and of monocarboxylic or dicarboxylic acid**, such as esters of diol dimer and of fatty acid and esters of diol dimer and of dicarboxylic acid dimer, in particular which may be obtained from a dicarboxylic acid dimer derived in particular from the dimerization of an unsaturated fatty acid in particular of C₈ to C₃₄, in particular of C₁₂ to C₂₂, in particular of C₁₆ to C₂₀ and more particularly of C₁₈, such as esters of dilinoleic diacids and of dilinoleic diol dimers, for instance those sold by the company Nippon Fine Chemical under the trade names Lusplan DD-DA5[®] and DD-DA7[®];

* **polyesters resulting from the esterification of at least one triglyceride of hydroxylated carboxylic acid(s) with an aliphatic monocarboxylic acid and with an aliphatic dicarboxylic acid, which is optionally unsaturated**, for instance the succinic acid and isostearic acid castor oil sold under the reference Zenigloss by Zenitech;

* **hydrocarbon-based plant oils** such as fatty acid triglycerides (which are liquid at ambient temperature), in particular of fatty acids containing from 7 to 40 carbon atoms, such as heptanoic or octanoic acid triglycerides or jojoba oil; mention may be made in particular of saturated triglycerides such as caprylic/capric triglycerides and mixtures thereof, for example such as the product sold under the reference Myritol 318 from Cognis, glyceryl

triheptanoate, glyceryl trioctanoate, and C₁₈₋₃₆ acid triglycerides such as those sold under the reference DUB TGI 24 by Stéarineries Dubois, and unsaturated triglycerides such as olive oil, ximenia oil and pracaxi oil;

* **sucrose esters**, preferably chosen from hydrocarbon-based esters of sucrose and of a C₂-C₆ carboxylic acid, in particular those chosen from mixtures of esters of acetic acid and of isobutyric acid with sucrose, preferably sucrose diacetate hexakis(2-methylpropanoate), in particular the compound of which the INCI name is Sucrose Acetate Isobutyrate (sold in particular under the reference Sustane Saib Food Grade Kosher by the company Eastman Chemicals) and the compounds of INCI name Sucrose Polysoyate sold under the reference Crodaderm S by the company Croda, Sucrose Polybehenate sold under the reference Crodaderm B by the company Croda, Sucrose Polycottonseedate sold under the reference Crodaderm C by the company Croda; and mixtures thereof.

According to one preferred embodiment, the additional polar non-volatile hydrocarbon-based oil(s) is (are) chosen from C₁₀-C₂₆ alcohols, in particular octyldodecanol, ester oils comprising at least 17 carbon atoms and in particular aromatic or non-aromatic monoesters comprising at least 18 carbon atoms, tetraesters comprising at least 35 carbon atoms, and polyesters, in particular those obtained from hexanedioic, isostearic, capric or caprylic acids and from pentaerythritol, alone or as mixtures.

According to an advantageous embodiment of the invention, the content of additional polar non-volatile hydrocarbon-based oil(s) represents from 0.01% to 20% by weight and in particular from 0.5% to 16% by weight, relative to the total weight of the composition.

Advantageously, in the case where the composition contains any, the content of additional polar non-volatile oil(s) represents at most 50% by weight relative to the weight of the mixture of the non-volatile hydrocarbon-based second oil(s) (D) and of the additional polar non-volatile oil(s). Preferably, this content represents at most 40% by weight, even more advantageously 25% by weight, relative to the weight of the mixture of the non-volatile hydrocarbon-based second oil(s) and of the additional polar non-volatile oil(s).

Additional non-polar non-volatile oils

The composition according to the invention may also comprise at least one additional non-polar non-volatile hydrocarbon-based oil.

These oils may be of plant, mineral or synthetic origin.

The term "non-polar oil" is intended to mean, within the meaning of the present invention, an oil chosen from hydrocarbons, that is to say from compounds comprising only carbon and hydrogen atoms.

Preferably, the non-volatile non-polar hydrocarbon-based oil can be chosen from linear or branched hydrocarbons of mineral or synthetic origin, such as, for example:

- liquid paraffin and fractions thereof,
- squalane,
- isoeicosane,
- naphthalene oil,

5 - hydrogenated or non-hydrogenated polybutenes, such as, for example, Indopol H-100, Indopol H-300 or Indopol H-1500 sold or manufactured by the company Amoco,

 - polyisobutenes and hydrogenated polyisobutenes, for instance Parleam[®] sold by the company Nippon Oil Fats, Panalane H-300 E sold or manufactured by the company Amoco, Viseal 20000 sold or manufactured by the company Syntel and Rewopal PIB 1000 sold or
10 manufactured by the company Witco, or alternatively Parleam Lite sold by NOF Corporation,

 - decene/butene copolymers and polybutene/polyisobutene copolymers, in particular Indopol L-14,

 - polydecenes and hydrogenated polydecenes, hydrogenated C₆-C₁₄ polyolefins, such
15 as for example: Puresyn 2, Puresyn 10 and Puresyn 150, sold or manufactured by the company Mobil Chemicals, or alternatively Puresyn 6 sold by ExxonMobil Chemical),

- and mixtures thereof.

Advantageously, if the composition contains any, the content of additional non-polar
20 non-volatile hydrocarbon-based oil(s) ranges from 0.5% to 12% by weight, relative to the total weight of the composition.

Preferably, if the composition comprises at least one additional non-polar non-volatile hydrocarbon-based oil, then the content of this or these oils is less than that of the non-volatile hydrocarbon-based second oil(s) (D). Preferably, the content of this or these
25 additional non-polar non-volatile hydrocarbon-based oil(s) is less than that of the non-volatile silicone first oil(s) (C). Even more advantageously, if the composition comprises any, the proportion of additional non-polar non-volatile hydrocarbon-based oil(s) represents less than half by weight of the non-volatile silicone first oil(s) (C).

30 **VOLATILE ADDITIONAL OILS**

The composition according to the invention may also comprise at least one additional volatile oil.

Preferably, said volatile oil is chosen from volatile hydrocarbon-based oils, volatile silicone oils and/or volatile fluorinated oils.

35 The additional volatile oil may in particular be a silicone oil or a hydrocarbon-based oil, which is preferably non-polar.

According to a first embodiment, the additional volatile oil is a silicone oil and may be chosen in particular from silicone oils with a flash point ranging from 40°C to 102°C,

preferably with a flash point of greater than 55°C and less than or equal to 95°C, and preferentially ranging from 65°C to 95°C.

As additional volatile silicone oils that may be used in the invention, mention may be made of linear or cyclic silicones with a viscosity at ambient temperature of less than 8 centistokes (cSt) ($8 \times 10^{-6} \text{ m}^2/\text{s}$), and in particular containing from 2 to 10 silicon atoms, and in particular from 2 to 7 silicon atoms, these silicones optionally comprising alkyl or alkoxy groups containing from 1 to 10 carbon atoms. Mention may in particular be made, as volatile silicone oil which can be used in the invention, of dimethicones with viscosities of 5 and 6 cSt, octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, dodecamethylcyclohexasiloxane, heptamethylhexyltrisiloxane, heptamethyloctyltrisiloxane, hexamethyldisiloxane, octamethyltrisiloxane, decamethyltetrasiloxane and dodecamethylpentasiloxane, and their mixtures.

According to a third embodiment, the additional volatile oil is a hydrocarbon-based oil, which is preferably non-polar.

The additional non-polar volatile hydrocarbon-based oil may have a flash point ranging from 40°C to 102°C, preferably ranging from 40°C to 55°C and preferentially ranging from 40°C to 50°C.

The additional hydrocarbon-based volatile oil may in particular be chosen from hydrocarbon-based volatile oils containing from 8 to 16 carbon atoms, and mixtures thereof, and in particular:

- branched C₈-C₁₆ alkanes, such as C₈-C₁₆ isoalkanes (also known as isoparaffins), isododecane, isodecane or isohexadecane, and for example the oils sold under the Isopar or Permethyl trade names,

- linear alkanes, for example such as n-dodecane (C₁₂) and n-tetradecane (C₁₄), sold by Sasol respectively under the references Parafol 12-97 and Parafol 14-97, and also mixtures thereof, the undecane-tridecane mixture (Cetiol UT), the mixtures of n-undecane (C₁₁) and of n-tridecane (C₁₃) obtained in Examples 1 and 2 of Application WO 2008/155059 from Cognis, and mixtures thereof.

In accordance with one particular embodiment of the invention, if the composition comprises any, the volatile oil(s) is (are) chosen from non-polar volatile hydrocarbon-based oils, and preferably branched C₈-C₁₆ alkanes.

According to one particular embodiment, the additional volatile oil(s) may be present in a content ranging from 0.1% to 10% by weight, and in particular from 1% to 8% by weight relative to the total weight of said composition.

According to one particular embodiment, if the composition comprises at least one additional volatile oil, then the total content of this or these oil(s) is less than that of hydrocarbon-based second oil(s) (D). In addition, if the composition comprises any, the total content of additional volatile oil(s) is less than that of the non-volatile silicone first oil(s) (C).

Preferably, the composition is free of additional volatile oil(s).

HYDROPHILIC GELLING AGENTS

The composition according to the invention preferably comprises at least one hydrophilic gelling agent chosen from optionally modified polymers of natural origin.

For the purposes of the present patent application, the term "hydrophilic gelling agent" or "aqueous-phase-gelling polymer" is intended to mean a polymer that is capable of gelling the aqueous phase of the compositions according to the invention.

The gelling polymer that may be used according to the invention may in particular be characterized by its capacity to form in water, beyond a certain concentration C^* , a gel characterized by oscillatory rheology ($\mu = 1$ Hz) by a flow threshold τ_c at least equal to 10 Pa. This concentration C^* may vary widely according to the nature of the gelling polymer under consideration.

In particular, said polymer is chosen from:

- **galactomannans and derivatives thereof**, such as locust bean gum, fenugreek gum, Cassia gum and guar gums, and derivatives thereof.

As regards the guar gum derivatives, non-ionic guar gums modified with C_1 - C_6 hydroxyalkyl groups are more particularly intended. Among the hydroxyalkyl groups that may be mentioned, for example, are hydroxymethyl, hydroxyethyl, hydroxypropyl and hydroxybutyl groups. These guar gums are well known in the prior art and may be prepared, for example, by reacting the corresponding alkene oxides, for instance, propylene oxides, with the guar gum so as to obtain a guar gum modified with hydroxypropyl groups. The degree of hydroxyalkylation, which corresponds to the number of alkylene oxide molecules consumed by the number of free hydroxyl functions present on the guar gum, preferably ranges from 0.4 to 1.2.

Such non-ionic guar gums optionally modified with hydroxyalkyl groups are sold, for example, under the trade names Jaguar HP8, Jaguar HP60 and Jaguar HP120, Jaguar DC 293 and Jaguar HP 105 by the company Rhône-Poulenc (Meyhall) or under the name Galactasol 4H4FD2 by the company Aqualon.

Use may also be made of ionic alkyl guar derivatives, and particularly hydroxypropyl guar, modified with sodium methylcarboxylate groups (for example the product sold under the reference Jaguar XC97-1 by Rhodia), hydroxypropyltrimethylammonium guar chloride, and mixtures thereof;

- **biopolysaccharide gums of microbial origin**, such as scleroglucan gum or xanthan gum.

The xanthan gums are in particular sold under the names Keltrol, Keltrol T, Keltrol TF, Keltrol BT, Keltrol RD and Keltrol CG by the company Nutrasweet Kelco, or under the names Rhodicare S and Rhodicare H by the company Rhodia Chimie;

- **gums derived from plant exudates**, such as gum arabic, ghatti gum, karaya gum, gum tragacanth, carrageenan gum, agar gum and locust bean gum;
- **pectins, alginates and starches**;
- **mixtures thereof**.

5 Preferably, the composition comprises at least one hydrophilic gelling agent chosen from guar gums and derivatives thereof, preferably chosen from guar gum, hydroxypropyl guar, hydroxypropyl guar modified with sodium methylcarboxylate groups, hydroxypropyltrimethylammonium guar chloride and xanthan gum, and mixtures thereof; preferably hydroxypropyl guar.

10 In accordance with a particularly advantageous embodiment of the invention, the content of hydrophilic gelling agent represents from 0.01% to 10% by weight, preferably from 0.05% to 5% by weight, relative to the total weight of the composition.

SURFACTANTS

15 The composition according to the invention may contain one or more surfactants that are present, for example, in a content ranging from 0.5% to 10% by weight and preferably from 1% to 5% by weight, relative to the total weight of the composition.

A surfactant appropriately chosen to obtain a stable emulsion, more particularly an oil-in-water emulsion, is preferably used.

20 These surfactants may be chosen from non-ionic, anionic, cationic and amphoteric surfactants, and mixtures thereof, preferably non-ionic or anionic surfactants.

Reference may be made to Kirk-Othmer's Encyclopedia of Chemical Technology, volume 22, pages 333-432, 3rd Edition, 1979, Wiley, for the definition of the emulsifying properties and functions of surfactants, in particular pages 347-377 of this reference, for the
25 anionic, amphoteric and non-ionic surfactants.

According to a first embodiment, the composition comprises at least one hydrocarbon-based surfactant.

Non-ionic surfactants

30 The non-ionic surfactants may be chosen in particular from alkyl and polyalkyl esters of poly(ethylene oxide), oxyalkylenated alcohols, alkyl and polyalkyl ethers of poly(ethylene oxide), optionally polyoxyethylenated alkyl and polyalkyl esters of sorbitan, optionally polyoxyethylenated alkyl and polyalkyl ethers of sorbitan, alkyl and polyalkyl glycosides or polyglycosides, in particular alkyl and polyalkyl glucosides or polyglucosides,
35 alkyl and polyalkyl esters of sucrose, optionally polyoxyethylenated alkyl and polyalkyl esters of glycerol, and optionally polyoxyethylenated alkyl and polyalkyl ethers of glycerol, and mixtures thereof.

1) Alkyl and polyalkyl esters of poly(ethylene oxide) that are preferably used are those with a number of ethylene oxide (EO) units ranging from 2 to 200. Examples that may

be mentioned include stearate 40 EO, stearate 50 EO, stearate 100 EO, laurate 20 EO, laurate 40 EO and distearate 150 EO.

2) Alkyl and polyalkyl ethers of poly(ethylene oxide) that are preferably used are those with a number of ethylene oxide (EO) units ranging from 2 to 200. Examples that may
5 be mentioned include cetyl ether 23 EO, oleyl ether 50 EO and phytosterol 30 EO.

3) Oxyalkylenated alcohols, which are in particular oxyethylenated and/or oxypropylenated, that are preferably used are fatty alcohols comprising in particular at least eight carbon atoms and possibly comprising from 1 to 150 oxyethylene and/or oxypropylene units, in particular containing from 20 to 100 oxyethylene units, in particular ethoxylated
10 C₈-C₂₄ and preferably C₁₂-C₁₈ fatty alcohols, such as stearyl alcohol ethoxylated with 10 oxyethylene units (CTFA name Steareth-10), stearyl alcohol ethoxylated with 20 oxyethylene units (CTFA name Steareth-20), for instance Brij 78 sold by the company Uniqema, stearyl alcohol ethoxylated with 100 oxyethylene units (CTFA name Steareth-100), cetearyl alcohol ethoxylated with 30 oxyethylene units (CTFA name Cetareth-30),
15 and the mixture of C₁₂-C₁₅ fatty alcohols comprising 7 oxyethylene units (CTFA name C₁₂-C₁₅ Pareth-7), for instance the product sold under the name Neodol 25-7[®] by Shell Chemicals; behenyl alcohol ethoxylated with 100 oxyethylene units (CTFA name beheneth-100) or in particular oxyalkylenated (oxyethylenated and/or oxypropylenated) alcohols containing from 1 to 15 oxyethylene and/or oxypropylene units, in particular ethoxylated
20 C₈-C₂₄ and preferably C₁₂-C₁₈ fatty alcohols, such as stearyl alcohol ethoxylated with 2 oxyethylene units (CTFA name Steareth-2), for instance Brij 72 sold by the company Uniqema;

4) Optionally polyoxyethylenated alkyl and polyalkyl esters of sorbitan that are preferably used are those with a number of ethylene oxide (EO) units ranging from 0 to 100.
25 Examples that may be mentioned include sorbitan laurate 4 or 20 EO, in particular polysorbate 20 (or polyoxyethylene (20) sorbitan monolaurate) such as the product Tween 20 sold by the company Uniqema, sorbitan palmitate 20 EO, sorbitan stearate 20 EO, sorbitan oleate 20 EO, or else the Cremophor products (RH 40, RH 60, etc.) from BASF. Non-polyoxyethylenated sorbitan alkyl and polyalkyl esters that may preferably be used are
30 a mixture of sorbitan stearate and of sucrose cocoate, preferably the product sold under the reference Arlacel 2121U from Croda.

5) Optionally polyoxyethylenated alkyl and polyalkyl ethers of sorbitan that are preferably used are those with a number of ethylene oxide (EO) units ranging from 0 to 100.

6) Alkyl and polyalkyl glucosides or polyglucosides that are preferably used are those
35 containing an alkyl group comprising from 6 to 30 carbon atoms and preferably from 6 to 18 or even from 8 to 16 carbon atoms, and containing a glucoside group preferably comprising from 1 to 5 and in particular 1, 2 or 3 glucoside units. The alkylpolyglucosides may be chosen, for example, from decylglucoside (C₉/C₁₁ alkylpolyglucoside (1.4)), for instance the product sold under the name Mydol 10[®] by the company Kao Chemicals or the

product sold under the name Plantacare 2000 UP[®] by the company Henkel and the product sold under the name Oramix NS 10[®] by the company SEPPIC; caprylyl/capryl glucoside, for instance the product sold under the name Plantacare KE 3711[®] by the company Cognis or Oramix CG 110[®] by the company SEPPIC; laurylglucoside, for instance the product sold under the name Plantacare 1200 UP[®] by the company Henkel or Plantaren 1200 N[®] by the company Henkel; cocoglucoside, for instance the product sold under the name Plantacare 818 UP[®] by the company Henkel; caprylylglucoside, for instance the product sold under the name Plantacare 810 UP[®] by the company Cognis; and mixtures thereof.

More generally, the surfactants of alkylpolyglycoside type are defined more specifically hereinbelow.

7) Examples of alkyl and polyalkyl esters of sucrose that may be mentioned are Crodesta F150, sucrose monolaurate sold under the name Crodesta SL 40, and the products sold by Ryoto Sugar Ester, for instance sucrose palmitate sold under the reference Ryoto Sugar Ester P1670, Ryoto Sugar Ester LWA 1695 or Ryoto Sugar Ester 01570.

8) Optionally polyoxyethylenated alkyl and polyalkyl esters of glycerol that are preferably used are those with a number of ethylene oxide (EO) units ranging from 0 to 100 and a number of glycerol units ranging from 1 to 30. Examples that may be mentioned include hexaglyceryl monolaurate, PEG-30 glyceryl stearate and glyceryl stearate.

9) Optionally polyoxyethylenated alkyl and polyalkyl ethers of glycerol that are preferably used are those with a number of ethylene oxide (EO) units ranging from 0 to 100 and a number of glycerol units ranging from 1 to 30. Examples that may be mentioned include Nikkol Batyl Alcohol 100 and Nikkol Chimyl Alcohol 100.

Anionic surfactants

The anionic surfactants may be chosen from alkyl ether sulfates, carboxylates, amino acid derivatives, sulfonates, isethionates, taurates, sulfosuccinates, alkylsulfoacetates, phosphates and alkyl phosphates, polypeptides, metal salts of C₁₀-C₃₀ and in particular C₁₂-C₂₀ fatty acids, in particular metal stearates, and mixtures thereof.

1) As alkali metal alkyl sulfates and alkyl ether sulfates, for example containing at least 12 carbon atoms, more particularly from 12 to 16 carbon atoms, and optionally comprising from 1 to 20 oxyethylene units, more particularly from 1 to 10 oxyethylene units, examples that may be mentioned include sodium lauryl sulfate, sodium lauryl ether sulfate (70/30 C₁₂-14) (2.2 EO) sold under the names Sipon AOS225 or Texapon N702 by the company Henkel, ammonium lauryl ether sulfate (70/30 C₁₂-14) (3 EO) sold under the name Sipon LEA 370 by the company Henkel, ammonium (C₁₂-C₁₄) alkyl ether (9 EO) sulfate sold under the name Rhodapex AB/20 by the company Rhodia Chimie, and the mixture of sodium magnesium lauryl oleyl ether sulfate sold under the name Empicol BSD 52 by the company Albright & Wilson.

2) Examples of carboxylates that may be mentioned include salts (for example alkali metal salts) of N-acylamino acids, glycol carboxylates, amido ether carboxylates (AECs) and polyoxyethylenated carboxylic acid salts.

5 The surfactant of glycol carboxylate type may be chosen from alkyl glycol carboxylics or 2-(2-hydroxyalkyloxyacetate), salts thereof and mixtures thereof. These alkyl glycol carboxylics comprise a linear or branched, saturated or unsaturated, aliphatic and/or aromatic alkyl chain containing from 8 to 18 carbon atoms. These carboxylics may be neutralized with mineral bases such as potassium hydroxide or sodium hydroxide.

10 Examples of surfactants of glycol carboxylic type that may be mentioned include sodium lauryl glycol carboxylate or sodium 2-(2-hydroxyalkyloxy acetate) such as the product sold under the name Beaulight Shaa® by the company Sanyo, Beaulight LCA-25N® or the corresponding acid form Beaulight Shaa (Acid form)®.

15 An example of an amido ether carboxylate (AEC) that may be mentioned is sodium lauryl amido ether carboxylate (3 EO) sold under the name Akypo Foam 30® by the company Kao Chemicals.

20 Examples of polyoxyethylenated carboxylic acid salts that may be mentioned include oxyethylenated (6 EO) sodium lauryl ether carboxylate (65/25/10 C₁₂₋₁₄₋₁₆) sold under the name Akypo Soft 45 NV® by the company Kao Chemicals, polyoxyethylenated and carboxymethylated fatty acids of olive oil origin sold under the name Olivem 400® by the company Biologia e Tecnologia, and oxyethylenated (6 EO) sodium tridecyl ether carboxylate sold under the name Nikkol ECTD-6NEX® by the company Nikkol.

3) Amino acid derivatives that may in particular be mentioned include alkaline salts of amino acids, such as:

25 - sarcosinates, for instance the sodium lauroyl sarcosinate sold under the name Sarkosyl NL 97® by the company Ciba or sold under the name Oramix L 30® by the company SEPPIC, sodium myristoyl sarcosinate sold under the name Nikkol Sarcosinate MN® by the company Nikkol, and sodium palmitoyl sarcosinate sold under the name Nikkol Sarcosinate PN® by the company Nikkol;

30 - alaninates, for instance sodium N-lauroyl N-methyl amidopropionate sold under the name Sodium Nikkol Alaninate LN 30® by the company Nikkol, or sold under the name Alanone ALE® by the company Kawaken, and triethanolamine N-lauroyl N-methyl alanine sold under the name Alanone Alta® by the company Kawaken;

35 - glutamates, for instance triethanolamine monococoyl glutamate sold under the name Acylglutamate CT-12® by the company Ajinomoto, or triethanolamine lauroyl glutamate sold under the name Acylglutamate LT-12® by the company Ajinomoto;

- aspartates, for instance the mixture of triethanolamine N-lauroyl aspartate and of triethanolamine N-myristoyl aspartate, sold under the name Asparack® by the company Mitsubishi;

- glycine derivatives (glycinates), for instance the sodium N-cocoyl glycinate sold under the names Amilite GCS-12[®] and Amilite GCK 12 by the company Ajinomoto;

- citrates, such as the oxyethylenated (9 mol) citric monoester of cocoyl alcohols sold under the name Witconol EC 1129 by the company Goldschmidt, and the citric acid
5 monoester of glyceryl stearate;

- galacturonates, such as the sodium dodecyl-D-galactoside uronate sold by the company Soliance.

4) Examples of sulfonates that may be mentioned include alpha-olefin sulfonates, for instance the sodium alpha-olefin sulfonate (C₁₄₋₁₆) sold under the name Bio-Terge AS-40[®]
10 by the company Stepan, sold under the names Witconate AOS Protege[®] and Sulframmine AOS PH 12[®] by the company Witco or sold under the name Bio-Terge AS-40 CG[®] by the company Stepan, and the sodium secondary olefin sulfonate sold under the name Hostapur SAS 30[®] by the company Clariant.

5) Isethionates that may be mentioned include acylisethionates, for instance sodium
15 cocoylisethionate, such as the product sold under the name Jordapon CI P[®] by the company Jordan.

6) Taurates that may be mentioned include the sodium salt of palm kernel oil methyltaurate sold under the name Hostapon CT Pate[®] by the company Clariant; N-acyl N-methyltaurates, for instance the sodium N-cocoyl N-methyltaurate sold under the name
20 Hostapon LT-SF[®] by the company Clariant or sold under the name Nikkol CMT-30-T[®] by the company Nikkol, and the sodium palmitoyl methyltaurate sold under the name Nikkol PMT[®] by the company Nikkol.

7) Examples of sulfosuccinates that may be mentioned include the oxyethylenated (3 EO) lauryl alcohol monosulfosuccinate (70/30 C₁₂/C₁₄) sold under the names Setacin 103
25 Special[®] and Rewopol SB-FA 30 K 4[®] by the company Witco, the disodium salt of a C₁₂-C₁₄ alcohol hemisulfosuccinate, sold under the name Setacin F Special Paste[®] by the company Zschimmer Schwarz, the oxyethylenated (2 EO) disodium oleamidisulfosuccinate sold under the name Standapol SH 135[®] by the company Henkel, the oxyethylenated (5 EO) laurylamide monosulfosuccinate sold under the name Lebon A-
30 5000[®] by the company Sanyo, the oxyethylenated (10 EO) disodium salt of lauryl citrate monosulfosuccinate sold under the name Rewopol SB CS 50[®] by the company Witco, and the ricinoleic monoethanolamide monosulfosuccinate sold under the name Rewoder S 1333[®] by the company Witco. Polydimethylsiloxane sulfosuccinates may also be used, such as the disodium PEG-12 dimethicone sulfosuccinate sold under the name Mackanate-
35 DC30 by the company MacIntyre.

8) Examples of alkyl sulfoacetates that may be mentioned include the mixture of sodium lauryl sulfoacetate and disodium lauryl ether sulfosuccinate, sold under the name Stepan-Mild LSB by the company Stepan.

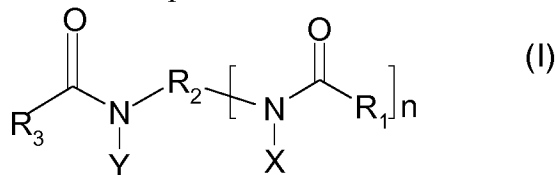
9) Examples of phosphates and alkyl phosphates that may be mentioned include monoalkyl phosphates and dialkyl phosphates, such as the lauryl monophosphate sold under the name MAP 20® by the company Kao Chemicals, the potassium salt of dodecylphosphoric acid, mixture of monoester and diester (predominantly diester), sold under the name Crafol AP-31® by the company Cognis, the mixture of octylphosphoric acid monoester and diester sold under the name Crafol AP-20® by the company Cognis, the mixture of ethoxylated (7 mol of EO) phosphoric acid monoester and diester of 2-butyl octanol, sold under the name Isofol 12 7 EO-Phosphate Ester® by the company Condea, the potassium or triethanolamine salt of mono(C₁₂-C₁₃)alkyl phosphate sold under the references Arlatone MAP 230K-40® and Arlatone MAP 230T-60® by the company Uniqema, the potassium lauryl phosphate sold under the name Dermalcare MAP XC-99/09® by the company Rhodia Chimie, and the potassium cetyl phosphate sold under the name Arlatone MAP 160K by the company Uniqema.

10) The polypeptides are obtained, for example, by condensation of a fatty chain onto amino acids from cereal and in particular from wheat and oat. Examples of polypeptides that may be mentioned include the potassium salt of hydrolyzed lauroyl wheat protein, sold under the name Aminofoam W OR by the company Croda, the triethanolamine salt of hydrolyzed cocoyl soybean protein, sold under the name May-Tein SY by the company Maybrook, the sodium salt of lauroyl oat amino acids, sold under the name Proteol Oat by the company SEPPIC, collagen hydrolysate grafted onto coconut fatty acid, sold under the name Geliderm 3000 by the company Deutsche Gelatine, and soybean proteins acylated with hydrogenated coconut acids, sold under the name Proteol VS 22 by the company SEPPIC.

11) As metal salts of C₁₀-C₃₀ and in particular C₁₂-C₂₀ fatty acids, mention may be made in particular of metal stearates, such as sodium stearate and potassium stearate, and also polyhydroxystearates.

Gemini surfactant

The composition can also comprise at least one Gemini surfactant of formula (I).



in which:

- R₁ and R₃ denote, independently of each other, an alkyl radical containing from 1 to 25 carbon atoms;

- R₂ denotes a spacer group constituted of a linear or branched alkylene chain containing from 1 to 12 carbon atoms;

- X and Y denote, independently of each other, a group $-(C_2H_4O)_a-(C_3H_6O)_bZ$, in which

- Z denotes a hydrogen atom or a $-CH_2-COOM$, $-SO_3M$, $-P(O)(OM)_2$, $-C_2H_4-SO_3M$, $-C_3H_6-SO_3M$ or $-CH_2(CHOH)_4CH_2OH$ radical, where M represents H or an alkali metal or alkaline earth metal or ammonium or alkanolammonium ion,
- a ranges from 0 to 15, b ranges from 0 to 10, and the sum of $a + b$ ranges from 1 to 25; and
- n ranges from 1 to 10.

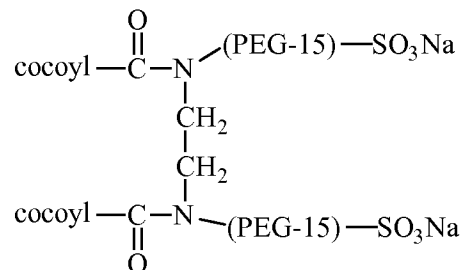
The gemini surfactant of formula (I) is preferably such that each of the groups R_1-CO- and R_3-CO- comprises from 8 to 20 carbon atoms, and preferably denotes a coconut fatty acid residue (mainly comprising lauric acid and myristic acid).

In addition, this surfactant is preferably such that, for each of the X and Y radicals, the sum of a and b has an average value ranging from 10 to 20 and is preferably equal to 15. A preferred group for Z is the group $-SO_3M$, where M is preferably an alkali metal ion, such as a sodium ion.

The spacer group R_2 is advantageously constituted of a linear C_1-C_3 alkylene chain, and preferably an ethylene (CH_2CH_2) chain.

Finally, n is advantageously equal to 1.

A surfactant of this type is in particular the one identified by the INCI name: Sodium dicocylethylenediamine PEG-15 sulfate, having the following structure:



it being understood that PEG represents the group CH_2CH_2O and cocoyl represents the coconut fatty acid residue.

This surfactant has a molecular structure very similar to that of ceramide-3.

Preferably, the gemini surfactant according to the invention is used as a mixture with other surfactants, and in particular as a mixture with (a) a glyceryl ester of a C_6-C_{22} fatty acid (preferably $C_{14}-C_{20}$ such as a stearate), (b) a diester of a C_6-C_{22} fatty acid (preferably $C_{14}-C_{20}$ such as a stearate) and of citric acid and of glycerol (in particular a diester of a C_6-C_{22} fatty acid and of glyceryl monocitrate), and (c) a $C_{10}-C_{30}$ fatty alcohol (preferably behenyl alcohol).

Advantageously, the composition according to the invention comprises a mixture of sodium dicocylethylenediamine PEG-15 sulfate, of glyceryl stearate, of glyceryl stearate monocitrate, and of behenyl alcohol.

More preferentially, the gemini surfactant according to the invention represents from 10% to 20% by weight and advantageously 15% by weight; the glyceryl ester of a C₆-C₂₂ fatty acid represents from 30% to 40% by weight, advantageously 35% by weight; the diester of a C₆-C₂₂ fatty acid and of citric acid and of glycerol represents from 10% to 20%
5 by weight, advantageously 15% by weight; and the C₁₀-C₃₀ fatty alcohol represents from 30% to 40% by weight, advantageously 35% by weight, relative to the total weight of the mixture of surfactants containing the gemini surfactant.

Advantageously, the composition according to the invention comprises a mixture of from 10% to 20% by weight of sodium dicocoylethylenediamine PEG-15 sulfate, from 30%
10 to 40% by weight of glyceryl stearate, from 10% to 20% by weight of glyceryl stearate monocitrate and from 30% to 40% by weight of behenyl alcohol, relative to the total weight of the mixture of surfactants comprising the gemini surfactant.

As a variant, the gemini surfactant according to the invention may be used as a mixture with an anionic surfactant, such as an ester of lauric acid, sodium lauroyl lactate. In this
15 case, the gemini surfactant preferably represents from 30 to 50% by weight, and the anionic surfactant represents from 50 to 70% by weight, relative to the total weight of the mixture.

The gemini surfactant may be used, for example, as a mixture with other surfactants in the form of the products sold by the company Sasol under the Ceralution[®] names, and in particular the following products:

20 • Ceralution[®] H: Behenyl Alcohol, Glyceryl Stearate, Glyceryl Stearate Citrate and Sodium Dicocoylethylenediamine PEG-15 Sulfate,

• Ceralution[®] F: Sodium Lauroyl Lactylate and Sodium Dicocoylethylenediamine PEG-15 Sulfate,

25 • Ceralution[®] C: Aqua, Capric/Caprylic triglyceride, Glycerin, Cetareth-25, Sodium Dicocoylethylenediamine PEG-15 Sulfate, Sodium Lauroyl Lactylate, Behenyl Alcohol, Glyceryl Stearate, Glyceryl Stearate Citrate, Gum Arabic, Xanthan Gum, Phenoxyethanol, Methylparaben, Ethylparaben, Butylparaben, Isobutylparaben (INCI names).

This gemini surfactant represents from 3 to 50% of the weight of these mixtures.

30 Preferably, the composition comprises as gemini surfactant the compound of which the INCI name is Behenyl Alcohol, Glyceryl Stearate, Glyceryl Stearate Citrate and Sodium Dicocoylethylenediamine PEG-15 Sulfate, sold under the name Ceralution[®] H by the company Sasol.

35 Preferably, the composition according to the invention comprises at least one non-ionic surfactant as stabilizer, preferably chosen from alkyl- and polyalkyl- esters of sorbitan, which are in particular non-polyoxyethylenated, and better still a mixture of sorbitan stearate and of sucrose cocoate, preferably that sold under the reference Arlatone 2121U from Croda.

According to a second embodiment, the composition may comprise at least one silicone surfactant. By way of example, mention may be made of:

a) as non-ionic surfactants with an HLB of greater than or equal to 8 at 25°C (method of Griffin; J. Soc. Cosm. Chem. 1954 (volume 5), pages 249-256), used alone or as a mixture, mention may in particular be made of:

- dimethicone copolyol, such as the product sold under the name Q2-5220® by the company Dow Corning;

- dimethicone copolyol benzoate, such as the product sold under the names Finsolv SLB 101® and 201® by the company Fintex;

b) as non-ionic surfactants with an HLB of less than 8 at 25°C (Griffin method), used alone or as a mixture; mention may in particular be made of:

- the mixture of cyclomethicone/dimethicone copolyol sold under the name Q2-3225C® by the company Dow Corning.

According to one particular embodiment, a composition according to the invention can comprise less than 5% by weight of silicone surfactant(s), in particular less than 4% by weight, in particular less than 3% by weight, more particularly less than 2% by weight and in particular less than 1% by weight, or can be totally free of silicone surfactant.

Preferably, the composition according to the invention comprises at least one non-ionic surfactant as stabilizer, preferably chosen from alkyl and polyalkyl esters of sorbitan, which are in particular non-polyoxyethylenated, and better still a mixture of sorbitan stearate and of sucrose cocoate, preferably the product sold under the reference Arlacel 2121 from Croda; or alternatively chosen from fatty alcohols, in particular containing at least 8 carbon atoms, which are oxyalkylenated, in particular oxyethylenated and/or oxypropylenated and possibly comprising from 1 to 150 oxyethylene and/or oxypropylene units, in particular containing from 20 to 100 oxyethylene units, in particular ethoxylated fatty alcohols, in particular of C₈-C₂₄ and preferably of C₁₂-C₁₈, or mixtures thereof.

ADDITIONAL COMPOUNDS

A composition according to the invention may also comprise at least one additional compound chosen from fillers, waxes, pasty fatty substances, and mixtures thereof.

Fillers

A cosmetic composition used according to the invention may comprise at least one filler, of organic or mineral nature.

The term “filler” should be understood as meaning colourless or white solid particles of any shape which are in an insoluble form dispersed in the medium of the composition. Of inorganic or organic nature, they make it possible to confer body or firmness on the

composition and/or softness and uniformity on the makeup. They are different from colorants.

Among the fillers that may be used in the compositions according to the invention, mention may be made of silica, kaolin, bentone, starch, lauroyl lysine, and fumed silica particles, optionally hydrophilically or hydrophobically treated, and mixtures thereof.

A composition used according to the invention may comprise one or more fillers in a content ranging from 0.1% to 15% by weight and in particular from 0.1% to 5% by weight relative to the total weight of the composition.

Wax(es)

Advantageously, a solid fatty substance is featured by at least one wax. Thus, the composition according to the invention may also further comprise at least one wax.

For the purposes of the invention, the term “wax” is intended to mean a lipophilic compound, which is solid at ambient temperature (25°C), with a reversible solid/liquid change of state, which has a melting point of greater than or equal to 30°C, which may be up to 120°C.

The waxes that may be used in a composition according to the invention are chosen from solid waxes that may or may not be deformable at ambient temperature, of animal, plant, mineral or synthetic origin, and mixtures thereof.

Examples that may be mentioned include solid fatty alcohols comprising from 10 to 24 carbon atoms and more preferentially from 12 to 22 carbon atoms. As particular examples of fatty alcohols that may preferably be used, mention may be made in particular of myristyl alcohol, palmityl alcohol, behenyl alcohol, erucyl alcohol and arachidyl alcohol, and mixtures thereof.

Hydrocarbon-based waxes, for instance beeswax, lanolin wax or Chinese insect waxes; rice wax, carnauba wax, candelilla wax, ouricury wax, esparto grass wax, cork fibre wax, sugar cane wax, Japan wax and sumac wax; montan wax, microcrystalline waxes, paraffins and ozokerite; polyethylene waxes, the waxes obtained by Fisher-Tropsch synthesis and waxy copolymers, and also esters thereof, may in particular be used.

Mention may also be made of waxes obtained by catalytic hydrogenation of animal or plant oils containing linear or branched C₈-C₃₂ fatty chains.

Among these waxes that may in particular be mentioned are hydrogenated jojoba oil, hydrogenated sunflower oil, hydrogenated castor oil, hydrogenated coconut oil, hydrogenated lanolin oil, bis(1,1,1-trimethylolpropane) tetrastearate sold under the name Hest 2T-4S by the company Heterene, and bis(1,1,1-trimethylolpropane) tetrabeheenate sold under the name Hest 2T-4B by the company Heterene.

The waxes obtained by transesterification and hydrogenation of plant oils, such as castor oil or olive oil, for instance the waxes sold under the names Phytowax ricin 16L64® and 22L73® and Phytowax Olive 18L57 by the company Sophim, may also be used. Such

waxes are described in patent application FR-A-2 792 190.

It is also possible to use silicone waxes, which may advantageously be substituted polysiloxanes, preferably of low melting point.

Among the commercial silicone waxes of this type, mention may be made in particular
5 of those sold under the names Abilwax 9800 or 9810 (Goldschmidt), KF910 and KF7002 (Shin-Etsu), or 176-1118-3 and 176-11481 (General Electric).

The silicone waxes that may be used may also be alkyl or alkoxy dimethicones such as the following commercial products: Abilwax 2428, 2434 and 2440 (Goldschmidt), or VP 1622 and VP 1621 (Wacker), and also (C₂₀-C₆₀) alkyl dimethicones, in particular (C₃₀-C₄₅)
10 alkyl dimethicones, such as the silicone wax sold under the name SF-1642 by the company GE-Bayer Silicones.

It is also possible to use hydrocarbon-based waxes modified with silicone or fluoro groups, for instance: siliconyl candelilla, siliconyl beeswax and Fluorobeeswax from Koster Keunen.

15 The waxes may also be chosen from fluoro waxes.

According to a preferred embodiment, a composition according to the invention may comprise at least one wax with a melting point of less than 65°C and preferably less than 63°C.

20 Such a wax may be chosen in particular from paraffin wax, stearyl alcohol, hydrogenated cocoyl glycerides, synthetic beeswax (in particular the product sold under the reference Cyclochem 326 A by Evonik-Goldschmidt), palm butter, sumach wax, silicone-treated beeswax, stearyl stearate, alkyl dimethicone wax, certain polymethylene waxes (such as Cirebelle 303 sold by Cirebelle), berry wax, olive oil wax, lemon wax, ceresin wax
25 (sold under the reference White Ceresin Wax JH 520 by the company Hansotech), and mixtures thereof.

According to an even more preferred embodiment, a composition according to the invention may comprise at least one hydrogenated olive oil ester wax, preferably the product of which the INCI name is Hydrogenated stearyl olive esters, for instance the product sold
30 under the reference Phytowax Olive 18 L 57 from Sophim and the product of which the INCI name is Hydrogenated myristyl olive esters, in particular such as the product sold under the reference Phytowax Olive 14L48 from Sophim.

If the composition comprises any, the content of wax advantageously represents from
35 0.01% to 10% by weight, preferably from 0.05% to 5% by weight, relative to the total weight of the composition.

According to one particular embodiment, the composition according to the invention is free of wax.

Pasty fatty substance

Advantageously, the solid fatty substance is featured by a pasty fatty substance. This embodiment is particularly advantageous when it is desired to obtain a glossy or satiny deposit, for instance in the case of a lip makeup product, for instance a lipstick.

Thus, the composition under consideration according to the invention may also comprise at least one pasty fatty substance.

For the purposes of the present invention, the term "pasty fatty substance" is intended to mean a lipophilic fatty compound that undergoes a reversible solid/liquid change in state, which has, in the solid state, an anisotropic crystalline arrangement and which comprises, at a temperature of 23°C, a liquid fraction and a solid fraction.

In other words, the starting melting point of the pasty compound may be less than 23°C. The liquid fraction of the pasty compound measured at 23°C may represent 9% to 97% by weight of the compound. This fraction that is liquid at 23°C preferably represents between 15% and 85% and more preferably between 40% and 85% by weight.

For the purposes of the invention, the melting point corresponds to the temperature of the most endothermic peak observed on thermal analysis (DSC) as described in standard ISO 11357-3; 1999. The melting point of a pasty substance or of a wax may be measured using a differential scanning calorimeter (DSC), for example the calorimeter sold under the name MDSC 2920 by the company TA Instruments.

The measurement protocol is as follows:

A sample of 5 mg of pasty substance or wax (depending on the case) placed in a crucible is subjected to a first temperature rise passing from -20°C to 100°C, at the heating rate of 10°C/minute, then is cooled from 100°C to -20°C at a cooling rate of 10°C/minute and finally subjected to a second temperature rise passing from -20°C to 100°C at a heating rate of 5°C/minute. During the second temperature rise, the variation in the difference between the power absorbed by the empty crucible and by the crucible containing the sample of pasty substance or wax as a function of the temperature is measured. The melting point of the compound is the temperature value corresponding to the top of the peak of the curve representing the variation in the difference in power absorbed as a function of the temperature.

The liquid fraction by weight of the pasty compound at 23°C is equal to the ratio of the heat of fusion consumed at 23°C to the heat of fusion of the pasty compound.

The heat of fusion of the pasty compound is the heat consumed by the compound in order to pass from the solid state to the liquid state. The pasty compound is said to be in the solid state when all of its mass is in crystalline solid form. The pasty compound is said to be in the liquid state when all of its mass is in liquid form.

The heat of fusion of the pasty compound is equal to the area under the curve of the thermogram obtained using a differential scanning calorimeter (DSC), such as the

calorimeter sold under the name MDSC 2920 by the company TA Instruments, with a temperature rise of 5°C or 10°C per minute, according to standard ISO 11357-3:1999. The heat of fusion of the pasty compound is the amount of energy required to make the compound change from the solid state to the liquid state. It is expressed in J/g.

5 The heat of fusion consumed at 23°C is the amount of energy absorbed by the sample to change from the solid state to the state that it has at 23°C, formed of a liquid fraction and a solid fraction.

10 The liquid fraction of the pasty compound measured at 32°C preferably represents from 30% to 100% by weight of the compound, preferably from 50% to 100% and more preferably from 60% to 100% by weight of the compound. When the liquid fraction of the pasty compound measured at 32°C is equal to 100%, the temperature of the end of the melting range of the pasty compound is less than or equal to 32°C.

15 The liquid fraction of the pasty compound measured at 32°C is equal to the ratio of the heat of fusion consumed at 32°C to the heat of fusion of the pasty compound. The heat of fusion consumed at 32°C is calculated in the same way as the heat of fusion consumed at 23°C.

The pasty fatty substance may be chosen from synthetic compounds and compounds of plant origin. A pasty fatty substance may be obtained by synthesis from starting materials of plant origin.

20 The pasty fatty substance is advantageously chosen from:

- lanolin and derivatives thereof, such as lanolin alcohol, oxyethylenated lanolins, acetylated lanolin, lanolin esters such as isopropyl lanolate, and oxypropylenated lanolins,
- polymeric or non-polymeric silicone compounds, for instance
- 25 polydimethylsiloxanes of high molecular masses, polydimethylsiloxanes containing side chains of the alkyl or alkoxy type containing from 8 to 24 carbon atoms, in particular stearyl dimethicones,
- polymeric or non-polymeric fluoro compounds,
- vinyl polymers, in particular:
- 30 - olefin homopolymers,
- olefin copolymers, such as vinylpyrrolidone / eicosene copolymers (for example sold under the name Antaron V220F from Ashland),
- hydrogenated diene homopolymers and copolymers,
- linear or branched homopolymer or copolymer oligomers of alkyl
- 35 (meth)acrylates preferably containing a C₈-C₃₀ alkyl group,
- homopolymer and copolymer oligomers of vinyl esters containing C₈-C₃₀ alkyl groups,
- homopolymer and copolymer oligomers of vinyl ethers bearing C₈-C₃₀ alkyl groups,

- liposoluble polyethers resulting from polyetherification between one or more C₂-C₁₀₀ and preferably C₂-C₅₀ diols,
- esters and polyesters, and
- mixtures thereof.

5 The pasty fatty substance may be a polymer, in particular a hydrocarbon-based polymer.

A preferred silicone and fluoro pasty fatty substance is polymethyltrifluoropropylmethylalkyldimethylsiloxane, manufactured under the name X22-1088 by Shin-Etsu.

10 Among the liposoluble polyethers, mention may be made in particular of copolymers of ethylene oxide and/or of propylene oxide with C₆-C₃₀ alkylene oxides. Preferably, the weight ratio of the ethylene oxide and/or propylene oxide to the alkylene oxides in the copolymer is from 5/95 to 70/30. In this family, mention will be made in particular of block copolymers comprising C₆-C₃₀ alkylene oxide blocks with a molecular weight ranging from
15 1000 to 10 000, for example a polyoxyethylene/polydodecylene glycol block copolymer such as the ethers of dodecanediol (22 mol) and of polyethylene glycol (45 oxyethylene or OE units) sold under the brand name Elfacos ST9 by Akzo Nobel.

Among the esters, the following are in particular preferred:

20 - esters of a glycerol oligomer, in particular diglycerol esters, in particular condensates of adipic acid and of glycerol, for which some of the hydroxyl groups of the glycerols have reacted with a mixture of fatty acids such as stearic acid, capric acid, stearic acid, isostearic acid and 12-hydroxystearic acid, for instance those sold under the brand name Softisan 649 by the company Sasol; or alternatively which have reacted with a mixture of fatty acids such as lauric acid, palmitic acid, cetylic acid and stearic acid, for instance
25 those sold under the reference Softisan 100 by the company Cremer Oleo;

- phytosterol esters;
- pentaerythritol esters;
- esters formed from:

30 - at least one C₁₆₋₄₀ alcohol, at least one of the alcohols being a Guerbet alcohol, and

35 - a diacid dimer formed from at least one C₁₈₋₄₀ unsaturated fatty acid, such as the ester of a dimer of fatty acids and of tall oil comprising 36 carbon atoms and of a mixture i) of Guerbet alcohols comprising 32 carbon atoms and ii) of behenyl alcohol; the ester of a dimer of linoleic acid and of a mixture of two Guerbet alcohols, 2-tetradecyloctadecanol (32 carbon atoms) and 2-hexadecyleicosanol (36 carbon atoms);

- non-crosslinked polyesters resulting from the polycondensation between a linear or branched C₄-C₅₀ dicarboxylic acid or polycarboxylic acid and a C₂-C₅₀ diol or polyol;

- polyesters resulting from the esterification between a polycarboxylic acid and an ester of aliphatic hydroxylated carboxylic acid, such as Risocast DA-L and Risocast DA-H sold by the Japanese company Kokyu Alcohol Kogyo, which are esters resulting from the esterification reaction of hydrogenated castor oil with dilinoleic acid or isostearic acid; and

5 - aliphatic esters of an ester resulting from the esterification between an ester of aliphatic hydroxylated carboxylic acid and an aliphatic carboxylic acid, for example the product sold under the trade name Salacos HCIS (V)-L by the company Nishing Oil.

A Guerbet alcohol is the reaction product of the Guerbet reaction, which is well known to those skilled in the art. It is a reaction for transforming a primary aliphatic alcohol into
10 its β -alkyl dimeric alcohol with loss of an equivalent of water.

The aliphatic carboxylic acids described above generally comprise from 4 to 30 and preferably from 8 to 30 carbon atoms. They are preferably chosen from hexanoic acid, heptanoic acid, octanoic acid, 2-ethylhexanoic acid, nonanoic acid, decanoic acid, undecanoic acid, dodecanoic acid, tridecanoic acid, tetradecanoic acid, pentadecanoic acid,
15 hexadecanoic acid, hexyldecanoic acid, heptadecanoic acid, octadecanoic acid, isostearic acid, nonadecanoic acid, eicosanoic acid, isoarachidic acid, octyldodecanoic acid, heneicosanoic acid and docosanoic acid, and mixtures thereof.

The aliphatic carboxylic acids are preferably branched.

The aliphatic hydroxylated carboxylic acid esters are advantageously derived from an
20 aliphatic hydroxylated carboxylic acid comprising from 2 to 40 carbon atoms, preferably from 10 to 34 carbon atoms and better still from 12 to 28 carbon atoms, and from 1 to 20 hydroxyl groups, preferably from 1 to 10 hydroxyl groups and better still from 1 to 6 hydroxyl groups. The esters of aliphatic hydroxylated carboxylic acid are in particular chosen from:

25 a) partial or total esters of saturated linear monohydroxylated aliphatic monocarboxylic acids;

 b) partial or total esters of unsaturated monohydroxylated aliphatic monocarboxylic acids;

 c) partial or total esters of saturated monohydroxylated aliphatic polycarboxylic
30 acids;

 d) partial or total esters of saturated polyhydroxylated aliphatic polycarboxylic acids;

 e) partial or total esters of C₂ to C₁₆ aliphatic polyols that have reacted with a monohydroxylated or polyhydroxylated aliphatic monocarboxylic or polycarboxylic acid,

35 f) and mixtures thereof.

- esters of diol dimer and of diacid dimer, if appropriate esterified on their free alcohol or acid function(s) with acid or alcohol radicals, in particular dimer dilinoleate esters; such esters can be chosen in particular from the esters having the following INCI nomenclature: bis-behenyl/isostearyl/phytosteryl dimer dilinoleyl dimer dilinoleate

(Plandool G), phytosteryl/isostearyl/cetyl/stearyl/behenyl dimer dilinoleate (Plandool H or Plandool S) and their mixtures,

- butters of plant origin, such as mango butter, such as the product sold under the name Lipex 203 by the company Aarhuskarlshamn, shea butter, in particular the product of which the INCI name is Butyrospermum Parkii Butter, such as the product sold under the reference Sheasoft® by the company Aarhuskarlshamn, cupuacu butter (Rain Forest RF3410 from the company Beraca Sabara), murumuru butter (Rain Forest RF3710 from the company Beraca Sabara), cocoa butter; and also orange wax, for instance the product sold under the reference Orange Peel Wax by the company Koster Keunen,

- totally or partially hydrogenated plant oils, for instance hydrogenated soybean oil, hydrogenated coconut oil, hydrogenated rapeseed oil, mixtures of hydrogenated plant oils such as the mixture of hydrogenated soybean, coconut, palm and rapeseed plant oil, for example the mixture sold under the reference Akogel® by the company Aarhuskarlshamn (INCI name Hydrogenated Vegetable Oil), the trans-isomerized partially hydrogenated jojoba oil manufactured or sold by the company Desert Whale under the commercial reference Iso-Jojoba-50® and partially hydrogenated olive oil, for instance the compound sold under the reference Beurrolive by the company Soliance.

The aliphatic esters of an ester are advantageously chosen from:

- the ester resulting from the esterification reaction of hydrogenated castor oil with isostearic acid in proportions of 1 to 1 (1/1), known as hydrogenated castor oil monoisostearate,

- the ester resulting from the esterification reaction of hydrogenated castor oil with isostearic acid in proportions of 1 to 2 (1/2), known as hydrogenated castor oil diisostearate,

- the ester resulting from the esterification reaction of hydrogenated castor oil with isostearic acid in proportions of 1 to 3 (1/3), known as hydrogenated castor oil triisostearate,

- and mixtures thereof.

In particular, the composition according to the invention may comprise a total content of pasty fatty substance of between 0.01% and 20% by weight relative to the total weight of the composition.

Preferably, the pasty fatty substance(s) may be present in an amount ranging from 0.05% to 10% by weight and in particular from 0.1% to 6% by weight, relative to the total weight of the composition.

MOISTURIZERS

The composition according to the invention may also comprise at least one moisturizer.

Mention may thus made of linear or branched, saturated or unsaturated C₂-C₈, preferably C₃-C₆, polyols comprising from 2 to 6 hydroxyl groups. Preferably, said polyols are liquid at ambient temperature (25°C) and at atmospheric pressure.

Preferably, the polyol(s) is (are) chosen from glycerol, propylene glycol, 1,3-butylene glycol, dipropylene glycol and diglycerol, and mixtures thereof.

Preferably, the polyol content represents from 0.1% to 16% by weight, preferably from 0.1% to 8% by weight and more particularly from 0.5% to 6% by weight, relative to the total weight of the composition.

10 AQUEOUS PHASE

As stated above, a composition according to the invention comprises at least 5% by weight of water and preferably at least 10% by weight of water, relative to the total weight of the composition.

Preferably, a composition according to the invention may comprise from 5% to 80% by weight, preferably from 10% to 70% by weight and in particular from 15% to 50% by weight of water, relative to the total weight of the composition.

The composition in accordance with the invention may comprise, besides water, at least one water-soluble solvent.

The aqueous phase may constitute the continuous phase of the composition.

The term "composition with an aqueous continuous phase" is intended to mean that a pH value can be measured for the composition with a suitable electrode (for example an MPC227 conductimeter from Mettler Toledo). As a guide, the pH of the composition is between 6.5 and 7.5.

In the present invention, the term "water-soluble solvent" denotes a compound that is liquid at ambient temperature and water-miscible (miscibility with water of greater than 50% by weight at 25°C and atmospheric pressure).

The water-soluble solvents that may be used in the compositions according to the invention may also be volatile.

Among the water-soluble solvents that may be used in the compositions in accordance with the invention, mention may be made in particular of lower monoalcohols containing from 1 to 5 carbon atoms, such as ethanol and isopropanol, C₃ and C₄ ketones and C₂-C₄ aldehydes.

Preferably, the composition according to the invention preferably comprises a total content of monoalcohols comprising between 2 and 8 carbon atoms of between 0 and 10% by weight (limits inclusive) relative to the total weight of the composition.

Preferably, the composition according to the invention comprises a total content of monoalcohols comprising between 2 and 8 carbon atoms of between 0 and 5% by weight (limits inclusive) relative to the total weight of the composition.

Preferably, the composition according to the invention is free of monoalcohols comprising between 2 and 8 carbon atoms.

Preferably, said monoalcohol(s) comprising between 2 and 8 carbon atoms is (are) chosen from ethanol, butanol, methanol and isopropanol.

5 However, the content of aqueous phase indicated previously does not include the contents of each of the abovementioned compounds.

A composition according to the invention may also comprise any additional component usually used in cosmetics, such as colorants, fillers or cosmetic active agents.

10 Needless to say, those skilled in the art will take care to select the optional additional compounds and/or the amount thereof such that the advantageous properties of the composition used according to the invention are not, or are not substantially, adversely affected by the envisioned addition.

15 **COLORANTS**

A composition according to the invention preferably comprises at least one colorant. Preferably, it is chosen from water-soluble or water-insoluble, liposoluble or non-liposoluble, organic or mineral colorants, and materials with an optical effect, and mixtures thereof.

20 For the purposes of the present invention, the term "colorant" is intended to mean a compound that is capable of producing a coloured optical effect when it is formulated in a sufficient amount in a suitable cosmetic medium.

According to a preferred embodiment, a composition according to the invention comprises at least one water-soluble colorant.

25 The water-soluble colorants used according to the invention are more particularly water-soluble dyes.

For the purposes of the invention, the term "water-soluble dye" is intended to mean any natural or synthetic, generally organic compound, which is soluble in an aqueous phase or water-miscible solvents and which is capable of colouring. In particular, the term "water-soluble" is intended to characterize the capacity of a compound to be dissolved in water, measured at 25°C, to a concentration at least equal to 0.1 g/l (production of a macroscopically isotropic, transparent, coloured or colourless solution). This solubility is in particular greater than or equal to 1 g/l.

35 As water-soluble dyes that are suitable for use in the invention, mention may be made in particular of synthetic or natural water-soluble dyes, for instance FDC Red 4 (CI: 14700), DC Red 6 (Lithol Rubine Na; CI: 15850), DC Red 22 (CI: 45380), DC Red 28 (CI: 45410 Na salt), DC Red 30 (CI: 73360), DC Red 33 (CI: 17200), DC Orange 4 (CI: 15510), FDC Yellow 5 (CI: 19140), FDC Yellow 6 (CI: 15985), DC Yellow 8 (CI: 45350 Na salt), FDC Green 3 (CI: 42053), DC Green 5 (CI: 61570), FDC Blue 1 (CI: 42090).

As non-limiting illustrations of sources of water-soluble colorant(s) that may be used in the context of the present invention, mention may be made in particular of those of natural origin, such as extracts of carmine of cochineal, of beetroot, of grape, of carrot, of tomato, of annatto, of paprika, of henna, of caramel and of curcumin.

Thus, the water-soluble colorants that are suitable for use in the invention are in particular carminic acid, betanin, anthocyanins, enocyanins, lycopene, beta-carotene, bixin, norbixin, capsanthin, capsorubin, flavoxanthin, lutein, cryptoxanthin, rubixanthin, violaxanthin, riboflavin, rhodoxanthin, cantaxanthin and chlorophyll, and mixtures thereof.

They may also be copper sulfate, iron sulfate, water-soluble sulfopolyesters, rhodamine, betaine, methylene blue, the disodium salt of tartrazine and the disodium salt of fuchsin.

Some of these water-soluble colorants are in particular permitted for food use. Representatives of these dyes that may be mentioned more particularly include dyes of the carotenoid family, referenced under the food codes E120, E162, E163, E160a-g, E150a, E101, E100, E140 and E141.

According to a preferred variant, the water-soluble colorant(s) that are to be transferred onto the skin and/or the lips intended to be made up are formulated in a physiologically acceptable medium so as to be compatible with impregnation into the substrate.

According to a particularly preferred embodiment, the water-soluble colorant(s) are chosen from the disodium salt of brilliant yellow FCF sold by the company LCW under the name DC Yellow 6, the disodium salt of fuchsin acid D sold by the company LCW under the name DC Red 33, and the trisodium salt of Rouge Allura sold by the company LCW under the name FD & C Red 40.

According to one particular embodiment of the invention, the composition according to the invention comprises only water-soluble dyes as colorants.

According to another embodiment, a composition according to the invention may comprise, besides the water-soluble colorants described previously, one or more additional colorants, in particular liposoluble dyes, or colorants such as pigments or naces, conventionally used in cosmetic compositions.

Among the liposoluble dyes, mention may be made particularly of dyes of fluoran type, for instance Red 21 and Red 27, or mixtures thereof.

The term "pigments" should be understood as meaning white or coloured, inorganic (mineral) or organic particles, which are insoluble in the liquid organic phase, and which are intended to colour and/or opacify the composition and/or the deposit produced with the composition.

The pigments may be chosen from mineral pigments, organic pigments and composite pigments (i.e. pigments based on mineral and/or organic materials).

The pigments may be chosen from monochromatic pigments, lakes, nacles, and pigments with an optical effect, for instance reflective pigments and goniochromatic pigments.

The mineral pigments may be chosen from metal oxide pigments, chromium oxides, iron oxides, titanium dioxide, zinc oxides, cerium oxides, zirconium oxides, manganese violet, Prussian blue, ultramarine blue and ferric blue, and mixtures thereof.

The organic pigments may be, for example:

- cochineal carmine,
- organic pigments of azo dyes, anthraquinone dyes, indigoid dyes, xanthene dyes, pyrene dyes, quinoline dyes, triphenylmethane dyes or fluoran dyes,
- organic lakes or insoluble sodium, potassium, calcium, barium, aluminium, zirconium, strontium or titanium salts of acidic dyes such as azo, anthraquinone, indigoid, xanthene, pyrene, quinoline, triphenylmethane or fluoran dyes. These dyes generally comprise at least one carboxylic or sulfonic acid group,
- melanin-based pigments.

Among the organic pigments, mention may be made of D&C Blue No. 4, D&C Brown No. 1, D&C Green No. 5, D&C Green No. 6, D&C Orange No. 4, D&C Orange No. 5, D&C Orange No. 10, D&C Orange No. 11, D&C Red No. 6, D&C Red No. 7, D&C Red No. 17, D&C Red No. 21, D&C Red No. 22, D&C Red No. 27, D&C Red No. 28, D&C Red No. 30, D&C Red No. 31, D&C Red No. 33, D&C Red No. 34, D&C Red No. 36, D&C Violet No. 2, D&C Yellow No. 7, D&C Yellow No. 8, D&C Yellow No. 10, D&C Yellow No. 11, FD&C Blue No. 1, FD&C Green No. 3, FD&C Red No. 40, FD&C Yellow No. 5 and FD&C Yellow No. 6.

The hydrophobic treatment agent may be chosen from silicones such as methicones, dimethicones and perfluoroalkylsilanes; fatty acids such as stearic acid; metal soaps such as aluminium dimyristate, the aluminium salt of hydrogenated tallow glutamate, perfluoroalkyl phosphates, perfluoroalkylsilanes, perfluoroalkylsilazanes, polyhexafluoropropylene oxides, polyorganosiloxanes comprising perfluoroalkyl perfluoropolyether groups, amino acids; N-acylated amino acids or salts thereof; lecithin, isopropyl triisostearyl titanate, and mixtures thereof.

The N-acylated amino acids can comprise an acyl group having from 8 to 22 carbon atoms, such as, for example, a 2-ethylhexanoyl, caproyl, lauroyl, myristoyl, palmitoyl, stearoyl or cocoyl group. The salts of these compounds can be aluminium, magnesium, calcium, zirconium, zinc, sodium or potassium salts. The amino acid can, for example, be lysine, glutamic acid or alanine.

The term "alkyl" cited in the abovementioned compounds denotes in particular an alkyl group having from 1 to 30 carbon atoms and preferably having from 5 to 16 carbon atoms.

Hydrophobic-treated pigments are described in particular in patent application EP-A-
5 1 086 683.

Within the meaning of the present patent application, "nacre" is intended to mean coloured particles of any shape, which are or are not iridescent, produced in particular by certain molluscs in their shells or else synthesized, and which exhibit a colour effect via
10 optical interference.

Mention may be made, as examples of nacres, of pearlescent pigments, such as titanium mica covered with an iron oxide, mica covered with bismuth oxychloride, titanium mica covered with chromium oxide, titanium mica covered with an organic dye, in particular of the abovementioned type, and also pearlescent pigments based on bismuth oxychloride.
15 They may also be mica particles, at the surface of which are superposed at least two successive layers of metal oxides and/or of organic colorants.

The nacres may more particularly have a yellow, pink, red, bronze, orangey, brown, gold and/or coppery colour or glint.

As illustrations of nacres that may be introduced as interference pigments into the first
20 composition, mention may be made of the gold-coloured nacres sold in particular by the company Engelhard under the name Brilliant gold 212G (Timica), Gold 222C (Cloisonne), Sparkle gold (Timica), Gold 4504 (Chromalite) and Monarch gold 233X (Cloisonne); the bronze nacres sold in particular by the company Merck under the name Bronze fine (17384) (Colorona) and Bronze (17353) (Colorona) and by the company Engelhard under the name
25 Super bronze (Cloisonne); the orange nacres sold in particular by the company Engelhard under the name Orange 363C (Cloisonne) and Orange MCR 101 (Cosmica) and by the company Merck under the name Passion orange (Colorona) and Matte orange (17449) (Microna); the brown nacres sold in particular by the company Engelhard under the name Nu-antique copper 340XB (Cloisonne) and Brown CL4509 (Chromalite); the nacres with a
30 copper glint sold in particular by the company Engelhard under the name Copper 340A (Timica); the nacres with a red glint sold in particular by the company Merck under the name Sienna fine (17386) (Colorona); the nacres with a yellow glint sold in particular by the company Engelhard under the name Yellow (4502) (Chromalite); the red nacres with a gold glint sold in particular by the company Engelhard under the name Sunstone G012
35 (Gemtone); the pink nacres sold in particular by the company Engelhard under the name Tan opale G005 (Gemtone); the black nacres with a gold glint sold in particular by the company Engelhard under the name Nu antique bronze 240 AB (Timica), the blue nacres sold in particular by the company Merck under the name Matte blue (17433) (Microna), the white nacres with a silvery glint sold in particular by the company Merck under the name

Xirona Silver, and the goldenish-green pinky-orangey nacres sold in particular by the company Merck under the name Indian summer (Xirona), and mixtures thereof.

5 The colorant(s) may be present in a composition according to the invention in a content ranging from 0.01% to 8% by weight and preferably from 0.1% to 6% by weight relative to the total weight of said composition.

USUAL ADDITIONAL COSMETIC INGREDIENTS

10 A composition according to the invention may also comprise any common cosmetic ingredient, which may be chosen in particular from antioxidants, additional film-forming polymers (lipophilic or hydrophilic) other than alkylcellulose and in particular other than ethylcellulose, semi-crystalline polymers, liposoluble or water-soluble moisturizers, other than the polyols mentioned above, fragrances, preserving agents, neutralizers, sunscreens, sweeteners, vitamins, free-radical scavengers and sequestrants, and mixtures thereof.

15 Of course, those skilled in the art will take care to choose the optional additional ingredients and/or their amounts so that the advantageous properties of the composition according to the invention are not, or not substantially, detrimentally affected by the envisaged addition.

20 The composition according to the invention may optionally comprise at least one hydrocarbon-based resin of which the number-average molecular weight is less than or equal to 10 000 g/mol, in particular ranging from 250 to 5000 g/mol, better still less than or equal to 2000 g/mol, and in particular ranging from 250 to 2000 g/mol.

25 The number-average molecular weights (M_n) are determined by gel permeation liquid chromatography (THF solvent, calibration curve established with linear polystyrene standards, refractometric detector).

30 More particularly, these resins may be indene hydrocarbon-based resins (in particular those which are optionally hydrogenated and which result from the polymerization, in a major proportion of indene monomer and in a minor proportion of monomer chosen from styrene, methylindene, methylstyrene and mixtures thereof); aliphatic resins of pentanediene (in particular resulting from the polymerization in a major proportion of the 1,3-pentanediene monomer(trans or cis piperylene) and of minor monomer(s) chosen from isoprene, butene, 2-methyl-2-butene, pentene, 1,4-pentanediene and mixtures thereof); mixed resins of pentanediene and of indene (for example resulting from the polymerization of a mixture of pentanediene and indene monomers such as those described above); diene
35 resins of cyclopentanediene dimers (for example resulting from the polymerization of first monomer chosen from indene and styrene, and of second monomer chosen from cyclopentanediene dimers, such as dicyclopentanediene, methyldicyclopentanediene, the other dimers of pentanediene, and mixtures thereof); diene resins of isoprene dimers (for

example the terpene resins resulting in particular from the polymerization of at least one monomer chosen from α -pinene, α -pinene, limonene, and mixtures thereof).

More particularly suitable are indene hydrocarbon-based resins, aliphatic resins of pentadiene, mixed resins of pentanediene and of indene, diene resins of cyclopentenediene dimers, diene resins of isoprene dimers or mixtures thereof, and more advantageously, in particular indene hydrocarbon-based resins, aliphatic resins of pentadiene, or mixtures thereof; and preferably indene hydrocarbon-based resins.

Even more especially, mention may be made of hydrogenated indene/methylstyrene/styrene copolymers, such as those sold under the name Regalite by the company Eastman Chemical, such as Regalite R 1100, Regalite R 1090, Regalite R-7100, Regalite R 1010 Hydrocarbon Resin and Regalite R 1125 Hydrocarbon Resin.

Preferably, if the composition comprises any, the content of these hydrocarbon-based resins, of which the number-average molecular weight is less than or equal to 10 000 g/mol is less than 2% by weight relative to the total weight of the composition. Preferably, the composition does not comprise such hydrocarbon-based resins.

A composition according to the invention may more particularly be a composition for making up and/or caring for keratin materials, in particular the skin and/or the lips, and better still the lips.

According to a preferred embodiment, a composition of the invention is a liquid lipstick.

By way of illustration of liquid compositions for the lips, mention may particularly be made of lip glosses and/or more generally liquid lipsticks.

The composition according to the invention may be manufactured via the known processes generally used in the cosmetic field.

The examples and figures that follow are presented as nonlimiting illustrations of the invention.

EXAMPLES 1 TO 4 AND COMPARATIVE EXAMPLE:

The following liquid compositions for the lips comprising the raw materials indicated below were prepared (unless otherwise indicated, the contents are expressed by weight of commercial product):

Ingredients	comparative A composition	composition 1	Compositio n 2 invention	composition 3 invention	composition 4 invention
Water-soluble dyes	0.26	0.26	0.26	0.26	0.26
RED 7	0.5	0.5	0.5	0.5	0.5
Hydroxypropyl guar	0.2	0.2	0.2	0.2	0.2
Ethylcellulose (dispersion in water - 30% dry matter, containing ethylcellulose, sodium lauryl sulfate, cetyl alcohol; Aquacoat ECD 30 from FMC Biopolymer)	31.3	31.3	31.3	31.3	31.3
Propylene glycol dibenzoate (Lexfeel Shine, from Inolex Chemical Company)	-	31.3	31.3	31.3	23.3
Octyldodecanol	33	1.5	1.5	1.5	-
Pentaerythrityl tetraisostearate (Crodamol PTIS-LQ- (MV), from Croda)	-	-	-	-	1.5
Dimethicone (Belsil DM 100, from Dow Corning)	-	-	22	8.5	-
Trimethylsiloxyphenyl dimethicone (Belsil PDM 1000, from Dow Corning)	22	22	-	8.5	22
Diphenylsiloxyphenyl trimethicone (KF-56, from ShinEtsu)	-	-	-	-	8.0
Isohexadecane	-	-	-	5.00	-
Sorbitan stearate and sucrose cocoate (Arlacel 2121-U-FL- (MV), from Croda)	4	4	4	4	4
Ethanol / phenoxyethanol	4.0	4.0	4.0	4.0	4
Sweeteners	-	-	-	qs	qs
Water	qs 100	qs 100	qs 100	qs 100	qs 100

Protocol for preparing the compositions:

1/ The ethylcellulose predispersed in the water and most of the hydrocarbon-based phase (propylene glycol dibenzoate, octyldodecanol or pentaerythrityl tetraisostearate) are mixed, with Rayneri stirring at a temperature between 50-55°C (at least 1500 rpm).

2/ Once a homogeneous dispersion has been obtained, the mixture of surfactants and then the hydroxypropyl guar are added, with stirring, and the stirring is maintained until homogenization is obtained.

3/ The silicone oil(s) are then introduced little by little and where appropriate the isohexadecane, while maintaining stirring sufficient to keep a good vortex in the mixture.

4/ Once the introduction is finished, the mixture is left to cool, while stirring for approximately 10 minutes.

7/ The water-soluble dyes mixed with the remaining water are then added, followed by the Red 7 and the remainder of the previously mixed hydrocarbon-based phase, and finally the phenoxyethanol and the ethanol, and where appropriate the sweeteners, with stirring.

6/ The mixture once homogenized is packaged in a sealed sachet.

Evaluations

The appearance, the homogeneity and the stability of the compositions, and also the properties for use of the compositions and the characteristics of the deposits obtained after application of the compositions (non-tacky nature, migration, non-transfer, colour staying power, gloss) were then evaluated.

The homogeneity of the compositions was evaluated visually, after 24 hours of storage at 25°C.

The homogeneity and the gloss of the deposits were evaluated visually, by comparison of the various deposits with one another.

The non-tacky nature and the non-migration, non-transfer and colour staying power properties of the deposits can be evaluated by means of the protocols below, given by way of indication.

Application of the compositions:

The composition is applied to clean lips, by making them up separately in two passes only and by taking composition only once for each lip.

Once the lips have been made up, the distribution of the deposit is made uniform by pursing the lips and sliding them back and forward against one another.

Test for evaluating the tacky nature:

Once the lips have been made up as indicated above, the tacky nature is evaluated by means of the force required to unstick the lips once (sensory evaluation).

This evaluation is done immediately after making up the lips and 3 minutes later.

The more difficult it is to unstick the lips, the more tacky the product is.

5

It is also possible to evaluate the tackiness by means of a Taxt2i texturometer.

The composition is deposited on several stainless steel dishes 100 µm deep and is levelled off as quickly as possible. The dishes are left to dry at ambient temperature for 1 hour.

10

The clip mounted on the Taxt2i texturometer tightens an AU4G cylinder having a 6 mm diameter at the end of which is attached an end piece made of material of the smooth synthetic skin type which has the same diameter and is 2 mm thick.

The parameters of the compression tests with holding over time are indicated as follows: approach speed 1 mm/s; speed once contact detected: 0.1 mm/s; force: 0.283 N (i.e. a pressure of 0.01 MPa); holding time: 3 seconds; withdrawal speed: 0.1 mm/s.

15

The end piece is cleaned with alcohol between each measurement.

Exploitation of the results: The tackiness is characterized by the separation force measured during the pressure reduction (pull phase), corresponding to the integral of the curve under the time axis. This force is expressed positively in joules per square metre.

20

Migration evaluation test:

Once the lips have been made up as indicated above, the outline of the lips is observed 1 h 30 after application (sensory; at least 20 individuals; the scores assigned range from 0 to 15; the lower the value, the smaller the migration).

25

Non-transfer evaluation test:

Once the lips have been made up as indicated above, a white cup is kissed 5 minutes after application.

The colour transferred onto the cup is observed.

30

Colour staying power evaluation test:

A photo is taken of the bare lips and of the lips once made up as indicated above, just after application.

35

The colour staying power evaluation is carried out one hour after application of the composition and after a series of standardized tests ("kiss" on a paper tissue, drinking a cold and hot drink, eating a small standardized meal, for instance eating a few mouthfuls of a sandwich and an apple). A photo is taken of the lips just before and after the tests.

A Chromasphere SEI-M-02232-CHRO-0 as described in application FR 2 829 344 and comparison and scoring by means of an atlas are used for this purpose.

Results

All the compositions obtained are stable after 24 hours of storage at 25°C.

5 The compositions are easy to apply and give a homogeneous, fresh, comfortable and glossy deposit.

Composition	% colour staying power (panel 6 inds.)	Migration After 1 h 30 (panel 20 inds.)
Comparative composition A	18 ± 8	2.8
Composition 1 invention	51 ± 16	1.5 (*)
Composition 2 invention	44 ± 13	0.5
Composition 3 invention	40 ± 16	1.2
Composition 4 invention	50 ± 15	0.8

(*) after 2 hours.

The deposit obtained from the comparative composition is thin and not very tacky.

10 Those obtained using the compositions according to the invention are thinner and much less tacky.

In addition, the table above shows that the compositions according to the invention have a colour staying power that is significantly higher than that of the comparative composition.

15 In addition, the migration values are also significantly improved compared with that achieved with the comparative composition, which is in itself very satisfactory.

EXAMPLE 5 AND COMPARATIVE EXAMPLE

20 The following liquid compositions were prepared (unless otherwise indicated, the contents are expressed in weight of commercial product).

Ingredients	comparative composition B	composition 5 invention
Water-soluble dyes	0.26	0.26
RED 7	1.5	1.5
Hydroxypropyl guar	0.2	0.2
Ethylcellulose (dispersion in water - 30% dry matter, containing ethylcellulose, sodium lauryl sulfate, cetyl alcohol; Aquacoat ECD 30 from FMC Biopolymer)	31.3	31.3
Octyldodecanol	25	9.3

Propylene glycol dibenzoate (Lexfeel Shine, from Inolex Chemical Company)	7.8	23.5
Trimethylsiloxypheyl dimethicone (Belsil PDM 1000, from Dow Corning)	22	22
Ethanol / phenoxyethanol	4	4
Sorbitan stearate and sucrose cocoate (Arlacel 2121-U-FL-(MV), from Croda)	4	4
Water	qs 100	qs 100

Protocol for preparing the compositions

1/ The ethylcellulose predispersed in the water and most of the hydrocarbon-based phase (propylene glycol dibenzoate, octyldodecanol) are mixed, with Rayneri stirring at a temperature between 50-55°C (at least 1500 rpm).

2/ Once a homogeneous dispersion has been obtained, the mixture of surfactants and then the hydroxypropyl guar are added, with stirring, and the stirring is maintained until homogenization is obtained.

3/ The silicone oil(s) are then introduced little by little, while maintaining stirring sufficient to keep a good vortex in the mixture.

4/ Once the introduction is finished, the mixture is left to cool, with stirring for approximately 10 minutes.

5/ The water-soluble dyes and the remaining water are then added, followed by the Red 7 and the remainder of the previously mixed hydrocarbon-based phase, and finally the phenoxyethanol and the ethanol, with stirring.

6/ The mixture once homogenized is packaged in a sealed sachet.

The compositions are stable, homogeneous and easy to apply and give thin, fresh, homogeneous, glossy, comfortable deposits.

The composition according to the invention is a little less tacky, transfers less product and has a better colour staying power than the comparative composition.

EXAMPLE 6:

The following liquid composition for the lips was prepared (unless otherwise indicated, the contents are expressed in weight of commercial product).

Ingredients	Composition 6
Water-soluble dyes	0.26
RED 7	0.5
Hydroxypropyl guar	0.2
Ethylcellulose (dispersion in water - 30% dry matter, containing ethylcellulose, sodium lauryl sulfate, cetyl alcohol; Aquacoat ECD 30 from FMC Biopolymer)	31.4
Propylene glycol dibenzoate (Lexfeel Shine, from Inolex Chemical Company)	31.4
Bis-diglyceryl poly(2-acyladipate) (Softisan 649, from Cremer Oleo)	1.3
Trimethylsiloxypheyl dimethicone (Belsil PDM 1000, from Dow Corning)	22
Sorbitan stearate and sucrose cocoate (Arlacel 2121-U-FL-(MV), from Croda)	4
Ethanol / phenoxyethanol	4
Sweeteners	qs
Water	qs 100

Protocol for preparing the composition

1/ The ethylcellulose predispersed in the water and most of the hydrocarbon-based phase (propylene glycol dibenzoate, bis-diglyceryl poly(2-acyladipate)) are mixed, with Rayneri stirring at a temperature between 50-55°C (at least 1500 rpm).

2/ Once a homogeneous dispersion has been obtained, the mixture of surfactants and then the hydroxypropyl guar are added, with stirring, and the stirring is maintained until homogenization is obtained.

3/ The silicone oil is then introduced little by little, while maintaining stirring sufficient to keep a good vortex in the mixture.

4/ Once the introduction is finished, the mixture is left to cool, with stirring for approximately 10 minutes.

5/ The water-soluble dyes and the remaining water are then added, followed by the Red 7 and the remainder of the previously mixed hydrocarbon-based phase, and finally the phenoxyethanol, ethanol and sweeteners, with stirring.

6/ The mixture once homogenized is packaged in a sealed sachet.

The composition is stable, homogeneous and easy to apply. The resulting deposit is thin, fresh, homogeneous, glossy, comfortable and non-tacky.

The composition according to the invention transfers little, has an improved colour staying power and does not migrate.

EXAMPLE 7

- 5 The following liquid composition for the lips was prepared (unless otherwise indicated, the contents are expressed in weight of commercial product).

Ingredients	Composition 7
Water-soluble dyes	0.26
RED 7	0.5
Hydroxypropyl guar	0.2
Ethylcellulose (dispersion in water - 30% dry matter, containing ethylcellulose, sodium lauryl sulfate, cetyl alcohol; Aquacoat ECD 30 from FMC Biopolymer)	31.3
Propylene glycol dibenzoate (Lexfeel Shine, from Inolex Chemical Company)	26.3
Octyldodecanol	1.5
Bis-diglyceryl poly(2-acyladipate) (Softisan 649, from Cremer Oleo)	5.0
Trimethylsiloxypheyl dimethicone (Belsil PDM 1000, from Dow Corning)	22
Sorbitan stearate and sucrose cocoate (Arlacel 2121-U-FL-(MV), from Croda)	4
Ethanol/phenoxyethanol	4
Sweetener	qs
Water	qs 100

Protocol for preparing the composition

- 10 1/ The ethylcellulose predispersed in the water and most of the hydrocarbon-based phase (propylene glycol dibenzoate, octyldodecanol, bis-diglyceryl poly(2-acyladipate)) are mixed, with Rayneri stirring at a temperature between 50-55°C (at least 1500 rpm).
- 2/ Once a homogeneous dispersion has been obtained, the mixture of surfactants and then the hydroxypropyl guar are added, with stirring, and the stirring is maintained until
- 15 homogenization is obtained.
- 3/ The silicone oil is then introduced little by little, while maintaining stirring sufficient to keep a good vortex in the mixture.
- 4/ Once the introduction is finished, the mixture is left to cool, with stirring for approximately 10 minutes.

5/ The water-soluble dyes and the remaining water are then added, followed by the Red 7 and the remainder of the previously mixed hydrocarbon-based phase, and finally the phenoxyethanol, the ethanol and sweetener, with stirring.

6/ The mixture once homogenized is packaged in a sealed sachet.

5

The composition is stable, homogeneous and easy to apply.

The resulting deposit is thin, fresh, homogeneous, glossy, comfortable and non-tacky.

The composition transfers little, and has a good colour staying power.

10

CLAIMS

1. Cosmetic composition comprising an aqueous emulsion containing:

(A) at least 5% by weight of water relative to the weight of the composition;

5 (B) from 1% to 20% by weight, relative to the total weight of the composition of alkylcellulose, the alkyl residue of which comprises between 2 and 6 carbon atoms and preferably between 2 and 3 carbon atoms;

(C) at least one non-volatile first oil (C) chosen from silicone oils;

10 (D) at least one hydrocarbon-based non-volatile second oil (D) chosen from esters of a linear or branched, preferably saturated, in particular C₂-C₁₀, diol and of benzoic acid;

(E) at least one surfactant, which is preferably hydrocarbon-based.

2. Composition according to the preceding claim, characterized in that it is in the form of an oil-in-water emulsion.

15 3. Composition according to any one of the preceding claims, characterized in that it comprises from 5% to 80% by weight, preferably from 10% to 70% by weight, in particular from 15% to 60% by weight and better still from 20% to 50% by weight of water, relative to the total weight of the composition.

20 4. Composition according to any one of the preceding claims, characterized in that the alkylcellulose is chosen from ethylcellulose and propylcellulose, preferably ethylcellulose.

25 5. Composition according to any one of the preceding claims, characterized in that the alkylcellulose is present in a content, expressed as dry matter of alkylcellulose, ranging from 4% to 20% by weight and more preferentially from 4.5% to 15% by weight, relative to the total weight of the composition.

30 6. Composition according to any one of the preceding claims, characterized in that said non-volatile first oil (C) is chosen from non-volatile non-phenyl silicone oils, in particular dimethicones, and from phenyl trimethicones, phenyl dimethicones, diphenylsiloxypheyl trimethicones, diphenyl dimethicones, trimethylsiloxypheyl dimethicones, and mixtures thereof, and preferably trimethylsiloxypheyl dimethicones.

35 7. Composition according to any one of the preceding claims, characterized in that it comprises a content ranging from 5% to 50% by weight of non-volatile silicone first oil(s) (C), in particular from 5% to 45% by weight, relative to the total weight of the composition.

8. Composition according to any one of the preceding claims, characterized in that the non-volatile hydrogen-based second oil (D) is chosen from diesters of a linear or branched, saturated, C₂-C₁₀, more particularly C₂-C₆, preferably C₃-C₆, diol and of benzoic acid, preferably from ethylene glycol dibenzoate, diethylene glycol dibenzoate, propylene glycol dibenzoate, dipropylene glycol dibenzoate and also mixtures thereof, more particularly from propyleneglycol dibenzoate, dipropylene glycol dibenzoate and also mixtures thereof.

9. Composition according to any one of the preceding claims, characterized in that the content of non-volatile hydrocarbon-based second oil(s) (D) ranges between 5% to 40% by weight, more particularly between 5% and 35% by weight, relative to the total weight of the composition.

10. Composition according to any one of the preceding claims, characterized in that the surfactant(s) (E) is (are) chosen from hydrocarbon-based surfactants, which are preferably non-ionic, more particularly chosen from alkyl- and polyalkyl- esters of sorbitan, which are preferably non-polyoxyethylenated; fatty alcohols having at least 8 carbon atoms and which can comprise from 1 to 150 oxyethylene and/or oxypropylene units; mixtures thereof.

11. Composition according to any one of the preceding claims, characterized in that it comprises a content of surfactant(s) ranging from 0.5% to 10% by weight, preferably from 1% to 5% by weight, relative to the total weight of the composition.

12. Composition according to any one of the preceding claims, characterized in that it comprises at least one additional polar hydrocarbon-based oil different from the second oil (D), preferably chosen from:

- C₁₀-C₂₆ alcohols, preferably monoalcohols; preferably octyldodecanol;
- optionally hydroxylated monoesters, diesters or triesters of a C₂-C₈ monocarboxylic or polycarboxylic acid and of a C₂-C₈ alcohol;
- esters of a C₂-C₈ polyol and of one or more C₂-C₈ carboxylic acids;
- ester oils comprising at least 17 carbon atoms in particular, such as:
 - * monoesters comprising at least 18 carbon atoms
 - * monoesters of fatty acid comprising at least 18 carbon atoms and of diol
 - * diesters comprising at least 17 carbon atoms
 - * hydroxylated monoesters and diesters comprising at least 18 carbon atoms
 - * triesters comprising at least 35 carbon atoms
 - * tetraesters comprising at least 35 carbon atoms

* polyesters obtained by condensation of dimer and/or trimer of unsaturated fatty acid and of diol

* esters and polyesters of diol dimer and of monocarboxylic or dicarboxylic acid

* polyesters resulting from the esterification of at least one triglyceride of hydroxylated carboxylic acid(s) with an aliphatic monocarboxylic acid and with an aliphatic dicarboxylic acid, which is optionally unsaturated

* hydrocarbon-based plant oils

* sucrose esters

• mixtures thereof.

13. Composition according to Claim 12, characterized in that it comprises a content of additional polar non-volatile hydrocarbon-based oil(s) ranging from 0.01% to 20% by weight, preferably from 0.5% to 16% by weight, relative to the total weight of the composition.

14. Composition according to either one of Claims 12 and 13, characterized in that the content of additional polar non-volatile oil(s) represents at most 50% by weight, more particularly at most 40% by weight, preferably at most 25% by weight, relative to the weight of the mixture of the non-volatile hydrocarbon-based second oil(s) (D) and of the additional polar non-volatile oil(s).

15. Composition according to any one of the preceding claims, characterized in that it comprises at least one additional non-polar hydrocarbon-based oil, preferably chosen from:

- liquid paraffin or fractions thereof,
- squalane,
- isoeicosane,
- naphthalene oil,
- hydrogenated or non-hydrogenated polybutenes,
- hydrogenated or non-hydrogenated polyisobutenes,
- hydrogenated or non-hydrogenated polydecenes, hydrogenated C₆-C₁₄ polyolefins,
- decene/butene copolymers and polybutene/polyisobutene copolymers,
- mixtures thereof.

16. Composition according to the preceding claim, characterized in that the content of additional non-polar non-volatile hydrocarbon-based oil(s) is between 0.5% and 12% by weight, relative to the total weight of the composition.

17. Composition according to any one of the preceding claims, characterized in that the composition comprises at least one stabilizer chosen from hydrophilic gelling agents, preferably chosen from optionally modified polymers of natural origin, in particular such as galactomannans and derivatives thereof, biopolysaccharide gums of microbial origin, gums derived from plant exudates, pectins, alginates, starches, and mixtures thereof.

18. Composition according to any one of the preceding claims, characterized in that it comprises at least one colorant.

19. Composition according to any one of the preceding claims, characterized in that it also comprises at least one additional compound chosen from fillers, waxes, pasty fatty substances, and mixtures thereof.

20. Composition according to any one of the preceding claims, characterized in that it is in liquid form.

21. Composition according to any one of the preceding claims, characterized in that said composition is a composition for making up and/or caring for keratin materials, in particular the lips and/or the skin, and better still the lips.

22. Cosmetic process for making up and/or caring for keratin materials, in particular the skin and/or the lips, and better still the lips, comprising at least one step consisting in applying to said keratin materials at least one composition as defined according to any one of Claims 1 to 21.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/068373

A. CLASSIFICATION OF SUBJECT MATTER		
INV.	A61K8/37 A61K8/39	A61Q1/04 A61K8/73 A61K8/891 A61K8/06
ADD.		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) A61K A61Q		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE GNPD [Online] MINTEL; 1 July 2014 (2014-07-01), "Sun Kids Immediate UV Protection SPF 50 UVA & UVB PA++", XP002766701, Database accession no. 2528695 the whole document	1-22
X	FR 3 015 249 A1 (OREAL [FR]) 26 June 2015 (2015-06-26) page 1, line 6 - page 3, line 5 page 6, line 30 - page 7, line 4 page 16, line 5 - page 17, line 3 page 23, lines 19-34 claims; examples 1-2 ----- -/--	1-22
☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 29 September 2017		Date of mailing of the international search report 13/10/2017
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Authorized officer Paul Soto, Raquel

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2017/068373

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 999 922 A1 (OREAL [FR]) 27 June 2014 (2014-06-27) page 18 - page 22 examples claims 1-4, 17 -----	1-22

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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FR 3015249	A1	26-06-2015	CN 105828790 A 03-08-2016
			EP 3086761 A1 02-11-2016
			FR 3015249 A1 26-06-2015
			JP 2017500352 A 05-01-2017
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