Abstract:
The present invention relates to compositions for making up and/or caring for the skin and/or the lips, comprising: - at least one silsesquioxane resin, - at least one hydrocarbon-based resin with a number-average molecular weight of less than or equal to 10000 g/mol, - at least one non volatile silicone oil, preferably phenylated, and - at least one non volatile apolar hydrocarbonated oil, wherein the weight ratio of the silsesquioxane resin to the hydrocarbon-based resin is 1 or more, preferably 2 or more, preferably 4 or more preferably 7 or more.

Title: COSMETIC COMPOSITION BASED ON A SILSESQUIOXANE RESIN, A HYDROCARBON-BASED RESIN, A NON VOLATILE HYDROCARBONATED OIL AND A NON VOLATILE SILICONE OIL.

Agents: MURAYAMA, Yasuhiko et al; 1-9-2, Marunouchi, Chiyoda-ku, Tokyo, 100-6620 (JP).


Agents: MURAYAMA, Yasuhiko et al; 1-9-2, Marunouchi, Chiyoda-ku, Tokyo, 100-6620 (JP).


Published: — with international search report (Art. 21(3))
DESCRIPTION

COSMETIC COMPOSITION BASED ON A SILSESQUIOXANE RESIN, A HYDROCARBON-
BASED RESIN, A NON VOLATILE HYDROCARBONATED OIL AND A NON VOLATILE
SILICONE OIL

TECHNICAL FIELD

The present invention relates to a cosmetic composition, more particularly to a cosmetic composition
for making up and/or caring for the skin and/or the lips, comprising at least one silsesquioxane resin, a
hydrocarbon-based resin, a non volatile silicone oil and a non volatile hydrocarbonated oil.

The present invention also relates to the processes using such composition for making up and/or caring
for the skin and/or the lips, comprising the application to the skin and/or the lips of such cosmetic
composition.

BACKGROUND ART

In general, when women use a makeup product, especially of lips products such as lipstick or lipgloss
type, they wish this product to be easy to apply and to have, after application, comfort and good
remanence on the skin or the lips, in particular not to be transferred, and in particular no color or low
level of color to be transferred.

With regard to this expectation, one or more resins that are specifically dedicated towards affording
these improved remanence properties over time are commonly introduced into compositions of this
type. Illustrations of these compounds that may particularly be mentioned include silicone resins.

However, the abovementioned silicone resins that are advantageous in terms of remanence properties,
and in particular of wear properties, are unfortunately liable to give rise to a sensation of discomfort
during application (difficult, tacky spreading) and/or after application (tautness, mask effect) of the
cosmetic product containing them. Hydrocarbonated resins are also known to be advantageous in
terms of shine.

But these compositions usually have the drawback to have a poor non transfer level and the wear of
shine of the make-up deposit should also be enhanced, as well as the applications properties (glide and
smoothness while applying the composition) and comfort properties.

Therefore, there is a need to have a composition that is easy to apply and that can also form a deposit
on the skin or in the lips that is comfortable and that has a good shine and wear of shine level (during at
least 1 hour), without developing tackiness while drying.

DISCLOSURE OF INVENTION
The inventors have found, unexpectedly, that it turns out to be possible to overcome this drawback provided that such silsesquioxane resin and an hydrocarbon-based resin are used in combination with at least one non volatile silicone oil and a non volatile apolar hydrocarbonated oil.

The aim of the present invention is to overcome these drawbacks and to propose a cosmetic composition that is homogenous, stable (for example no separation into two phases, and/or exsudation, and/or sedimentation of the pigments, particularly after 24 hours at room temperature and even after seven days at 50°C), and capable, on the one hand, of affording good cosmetic properties such as glide and easiness to apply, in particular on the lips, good adhesion to the support (skin or lips) and thus good remanence of the deposit of the composition, in particular no or low level transfer of the color of the deposit, and forming a non-tacky or sparingly tacky deposit, having a good level of shine.

Thus, according to one of its aspects, the invention relates to a cosmetic composition for making up and/or caring for the skin and/or the lips, comprising in a physiologically acceptable medium:

- at least one silsesquioxane resin,
- at least one hydrocarbon-based resin with a number-average molecular weight of less than or equal to 10 000 g/mol,
- at least one non volatile silicone oil, preferably phenylated, and
- at least one non volatile apolar hydrocarbonated oil,

wherein the weight ratio of the silsesquioxane resin to the hydrocarbon-based resin is 1 or more, preferably 2 or more, preferably 4 or more preferably 7 or more.

Such a composition is stable and homogenous, and are preferably makeup compositions, whose deposition on keratin materials, and in particular the lips and/or the skin, is easy, uniform, has a good level of shine and has good remanence (no embrittlement or fragmentation of the deposit) and good transfer resistance after application (in particular, no transfer or poor transfer of the color of the deposit, in particular on a cup or a glass while drinking for example) and/or sparingly tacky or non-tacky. Such a deposit may especially afford a sensation of comfort to the wearer.

The present invention also relates to a cosmetic process for making up and/or caring for the skin and/or the lips, comprising at least the application to the said skin and/or the said lips of composition comprising, in a physiologically acceptable medium:

- at least one silsesquioxane resin,
- at least one hydrocarbon-based resin with a number-average molecular weight of less than or equal to 10 000 g/mol,
- at least one non volatile silicone oil, preferably phenylated, and
- at least one non volatile apolar hydrocarbonated oil, preferably an apolar hydrocarbonated oil,

wherein the weight ratio of the silsesquioxane resin to the hydrocarbon-based resin is 1 or more, preferably 2 or more, preferably 4 or more preferably 7 or more.

Advantageously, the composition under consideration according to the invention is an oil-in-oil type composition. In the oil in oil type cosmetic composition of the invention, the non volatile silicone oil and the non volatile hydrocarbon oil is in a stable oil in oil state before application, without being separated from each other. After application, the non volatile silicone oil comes up to the surface of the deposit, and this separated non volatile silicone oil covers an adherent layer of the non volatile
hydrocarbonated, the silsesquioxane resin and the hydrocarbon-based resin. Therefore, the resulting composition has good transfer resistance and offers a good level of shine. Rubbing the lips again each other during application further enhance this separation.

Advantageously, the composition under consideration according to the invention is anhydrous.

Advantageously, at least one said non volatile silicone oil is chosen from non volatile linear phenyl silicone oil.

BEST MODE FOR CARRYING OUT THE INVENTION

PHYSIOLOGICALLY ACCEPTABLE MEDIUM

For the purposes of the present invention, the term "physiologically acceptable medium" is intended to denote a medium that is suitable for the application of a composition to the skin and/or the lips, for instance the oils or organic solvents commonly used in cosmetic compositions.

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.

As emerges from the examples below, the combination under consideration according to the invention proves to be most particularly effective for affording a composition whose deposit on the skin or the lips that simultaneously has improved gloss and non transfer properties. Beside, the deposit also exhibit remanence over time, in particular of remanence of the colour of the deposit (no embrittlement or fragmentation of the deposit, which remains homogeneous) and satisfactory comfort properties, both on application (especially glidance, breakdown, thickness and uniformity of the deposit formed, and reduction of the tack on drying) and during wearing, namely softness, absence of a tacky sensation or of a sensation of tauntness or dryness.

What is more, in the case of lipsticks (solid or liquid such as gloss), this improvement of non transfer and non tackiness or sparingly tackiness is not obtained at the expense of the shine, which is another property generally sought for a makeup product of this type. Specifically, contrary to all expectation, no matt effect of the cosmetic product containing the combination under consideration according to the invention is noted.

The invention also preferably relates to a composition for making up and/or caring for the skin and/or the lips, comprising, in a physiologically acceptable medium, at least one silsesquioxane resin, at least one hydrocarbon-based resin, at least one non volatile silicone oil, at least one non apolar hydrocarbonated oil, and at least one colouring agent.

The compositions under consideration according to the invention and used in the processes according to the invention may be in solid or liquid form at 20°C.
According to one preferred embodiment, in particular in the case of a composition intended for caring for and/or making up the lips, the composition used according to the invention is anhydrous or contains less than 3% by weight of water and preferably less than 1% by weight of water, relative to the total weight of the composition.

The term "anhydrous" especially means that water is preferably not deliberately added to the composition, but may be present in trace amount in the various compounds used in the composition.

The composition according to the invention and/or that used according to the process according to the invention may be in the form of a composition for making up the skin and/or the lips, especially for facial or bodily skin; it may be a complexion product such as a foundation, a face powder or an eyeshadow; a lip product such as a lipstick or a lipcare product; a concealer product; a blusher; an eyeliner; a lip pencil or an eye pencil; a body makeup product; a gloss (lip gloss).

According to a first advantageous embodiment of the invention, the composition is intended for making up the lips and it is more particularly a lipstick (lipstick wand) or a gloss (liquid lipstick).

Advantageously, the lipstick compositions according to the invention are anhydrous.

For the purposes of the invention, the term "solid" characterizes the state of the composition at a temperature of 20°C. In particular, a solid composition according to the invention has, at a temperature of 20°C and at atmospheric pressure (760 mmHg), a hardness of greater than 30 Nm⁻¹ and preferably greater than 35 Nm⁻¹.

**Protocol for measuring the hardness**

The hardness of a composition especially of lipstick wand type is measured according to the following protocol:

The stick of lipstick is stored at 20°C for 24 hours before measuring the hardness.

The hardness may be measured at 20°C via the "cheese wire" method, which consists in transversely cutting a wand of product, which is preferably a circular cylinder, by means of a rigid tungsten wire 250 μm in diameter, by moving the wire relative to the stick at a speed of 100 mmVminute.

The hardness of the samples of compositions of the invention, expressed in Nm⁻¹, is measured using a DFGS2 tensile testing machine from the company Indelco-Chatillon.

The measurement is repeated three times and then averaged. The average of the three values read using the tensile testing machine mentioned above, noted Y, is given in grams. This average is converted into newtons and then divided by L which represents the longest distance through which the wire passes. In the case of a cylindrical wand, L is equal to the diameter (in metres).

The hardness is converted into Nm⁻¹ by the equation below:

\[(Y \times 10^3 \times 9.8)/L\]
For a measurement at a different temperature, the stick is stored for 24 hours at this new temperature before the measurement.

According to this measuring method, a solid composition according to the invention has a hardness at 20°C of greater than or equal to 30 Nm⁻¹, preferably greater than 35 Nm⁻¹ and preferably greater than 40 Nm⁻¹.

Preferably, the composition according to the invention especially has a hardness at 20°C of less than 500 Nm⁻¹, especially less than 400 Nm⁻¹ and preferably less than 300 Nm⁻¹.

In particular, a composition whose hardness is greater than 30 Nm⁻¹ is said to be "solid" at 20°C and at atmospheric pressure (760 mmHg).

According to a preferred embodiment, the composition according to the invention is liquid at 20°C.

**Protocol for measuring the viscosity**

The viscosity measurement is generally performed at 25°C, using a Rheomat RM1 80 viscometer equipped with a No. 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 shear rate of 200 rpm.

Preferably, the composition has at 25°C a viscosity of between 1 and 25 Pa.s, preferably between 2 and 20 Pa.s and preferably between 4 and 17 Pa.s.

Preferably, the viscosity at 25°C of a composition according to the invention is between 5 and 16 Pa.s.

The terms "between" and "ranging from" should be understood as including the limits.

The example that follows is given as an illustration, without any limiting nature.

The present invention also covers a cosmetic process for making up and/or caring for the lips, comprising at least the application to the said lips of a composition as defined above.

**Silsesquioxane resin**

The compositions of the present invention comprise at least one silsesquioxane resin.

More particularly, the silsesquioxane resins of the present invention are chosen from alkyl silsesquioxane resins which are silsesquioxane homopolymers and/or copolymers having an average siloxane unit of the general formula \( R_1^n SiO_{(4-n)2} \), wherein each \( R_1 \) is independently chosen from a hydrogen atom and a \( C_1-C_{10} \) alkyl group, wherein more than 80 mole % of \( R_1 \) represent a \( C_3-C_{10} \) alkyl group, \( n \) is a value of from 1.0 to 1.4, and more than 60 mole % of the copolymer comprises \( R_1^1 SiO_{3n} \) units.
Preferably, the silsesquioxane resin used is one where \( \text{R}_1 \) is a \( \text{C}_1 - \text{C}_{10} \), preferably a \( \text{C}_1 - \text{C}_4 \) alkyl group, and more preferably a propyl group.

5 A preferred silsesquoxane resin of the present invention is polypropylsilsesquioxane resin and/or \( \text{t} \)-propyl silsesquioxane resin, or mixture thereof. The \( \text{t} \)-propyl resin is commercially available from Dow-Corning under the tradename Dow Corning® 670 Fluid.

The silsesquioxane resin may be present in an amount ranging from about 0.1% to about 60% by weight, preferably from about 1% to about 50% by weight, more preferably from 5 to 40% by weight, and even more preferably from 10 to 30% by weight, relative to the total weight of the composition.

The cosmetic compositions of the present invention also contain at least one polypropylsilsesquioxane wax substituted with alkyl units having at least 30 carbons.

Polypropylsilsesquioxane waxes, in general, have been disclosed in patent publication WO2005/100444, published on October 27, 2005, the entire content of which is hereby incorporated by reference.

20 It should be noted, however, that not all polypropylsilsesquioxane waxes yield stable colored cosmetic emulsion products. More particularly, it has been found that only those polypropylsilsesquioxane waxes substituted with alkyl units having at least 30 carbons are stable.

The polypropylsilsesquioxane wax comprises at least 40 mole % of siloxy units having the formula \((\text{R}_2\text{R}'\text{SiO})_{2x}\text{(C}_3\text{H}_7\text{SiO})_{3y}\), where \( x \) and \( y \) have a value of 0.05 to 0.95, \( R \) is an alkyl group having from 1 to 8 carbon atoms, and \( R' \) is a monovalent hydrocarbon having 30 to 40 carbon atoms and greater. As used herein, \( x \) and \( y \) represent the mole fraction of \((\text{R}_2\text{R}'\text{SiO})_{2x}\) and \((\text{C}_3\text{H}_7\text{SiO})_{3y}\) siloxy units relative to each other present in the polypropylsilsesquioxane wax. Thus, the mole fraction of \((\text{R}_2\text{R}'\text{SiO})_{2x}\) and \((\text{C}_3\text{H}_7\text{SiO})_{3y}\) siloxy units each can independently vary from 0.05 to 0.95. Preferably \( R \) is a methyl, and \( R' \) is an alkyl having at least 30 carbons, available from Dow Corning.

25 Typically, the value of \( x \) is 0.05 to 0.95, or alternatively, 0.2 to 0.8, the value of \( y \) is 0.05 to 0.95, alternatively 0.2 to 0.8. However, the combination of \((\text{R}_2\text{R}'\text{SiO})_{2x}\) and \((\text{C}_3\text{H}_7\text{SiO})_{3y}\) siloxy units present must total at least 40 mole %, alternatively 60 mole %, or alternatively 90 mole % of all siloxy units present in the polypropylsilsesquioxane wax.

The number average molecular weight of the polypropylsilsesquioxane wax substituted with alkyl units having at least 30 carbons typically ranges from about 750 to about 10,000, such as from about 1,000 to about 5,000.

30 A particularly preferred polypropylsilsesquioxane wax for use in the present invention is a C30-45 ALKYLDMETHYLsLYL POLYPROPYLSilsESQUSIOXANE commercially available from DOW CORNING under the tradename SW-8005 C30 Resin Wax.
The polypropylsilsesquioxane wax substituted with alkyl units having at least 30 carbons is generally present in the cosmetic composition of the present invention in an amount ranging from about 0,1% to about 60% by weight, preferably from about 1% to about 50% by weight, more preferably from 5 to 40% by weight, and even more preferably from 10 to 30% by weight, relative to the total weight of the composition.

According to one particular preferred embodiment, the said silsesquioxane resin is dissolved in a hydrocarbon-based oil, which is preferably volatile, in particular isododecane.

Thus, the composition of the invention will comprise at least one hydrocarbon-based oil, which is preferably volatile, in particular at least isododecane, especially provided by the silsesquioxane resin solution.

More particularly, a composition for making up and/or caring for the lips, especially for the lips as defined above, may comprise at least 0,1% by weight of at least one silsesquioxane resin, preferably at least 1% by weight, relative to its total weight.

In embodiment variants of a composition and of a process according to the invention, the silsesquioxane resin may be present in a composition according to the invention in an amount ranging from 1% to 50% by weight of solids, relative to the total weight of the composition.

Thus, the silsesquioxane resin may be present in a composition according to the invention in an amount ranging from 5% to 40% by weight, relative to the total weight of the composition.

Similarly, the silsesquioxane resin may be present in a composition according to the invention in an amount ranging from 10% to 30% by weight, relative to the total weight of the composition.

**HYDROCARBON-BASED RESIN**

The composition according to the invention comprises at least one hydrocarbon-based resin.

Preferably, the resin used in the composition according to the invention (also known as the tackifying resin) has a number-average molecular weight of less than or equal to 10 000 g/mol, especially ranging from 250 to 5000 g/mol, better still less than or equal to 2000 g/mol and especially ranging from 250 to 2000 g/mol.

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

The resin of the composition according to the invention is advantageously a tackifying resin. Such resins are described especially in the Handbook of Pressure Sensitive Adhesive, edited by Donatas Satas, 3rd edition, 1989, pp. 609-619.
Preferably, the hydrocarbon-based resin is chosen from low molecular weight polymers that may be classified, according to the type of monomer they comprise, as:

- indene hydrocarbon-based resins, preferably such as resins derived from the polymerization in major proportion of indene monomer and in minor proportion of a monomer chosen from styrene, methylindene and methylstyrene, and mixtures thereof. These resins may optionally be hydrogenated. These resins may have a molecular weight ranging from 290 to 1150 g/mol.

Examples of indene resins that may be mentioned include those sold under the reference Escorez 7105 by the company Exxon Chem., Nevchem 100 and Nevex 100 by the company Neville Chem., Norsolene S105 by the company Sartomer, Picco 6100 by the company Hercules and Resinall by the company Resinall Corp., or the hydrogenated indene/methylstyrene/styrene copolymers sold under the name "Regalite" by the company Eastman Chemical, in particular Regalite R1 100, Regalite R1090, Regalite R7100, Regalite R1010 Hydrocarbon Resin and Regalite R1 125 Hydrocarbon Resin;

- aliphatic pentanediene resins such as those derived from the major polymerization of the 1,3-pentanediene (trans- or cis-piperylene) monomer and of minor monomers chosen from isoprene, butene, 2-methyl-2-butene, pentene and 1,4-pentanediene, and mixtures thereof. These resins may have a molecular weight ranging from 1000 to 2500 g/mol.

Such 1,3-pentanediene resins are sold, for example, under the references Piccodiene 95 by the company Eastman Chemical, Escorez 1304 by the company Exxon Chemicals, Nevta 100 by the company Neville Chem., or Wingtack 95 by the company Goodyear;

- mixed resins of pentanediene and of indene, which are derived from the polymerization of a mixture of pentanediene and indene monomers such as those described above, for instance the resins sold under the reference Escorez 2101 by the company Exxon Chemicals, Nevpone 9500 by the company Neville Chem., Hercotac 1148 by the company Hercules, Norsolene A 100 by the company Sartomer, and Wingtack 86, Wingtack Extra and Wingtack Plus by the company Goodyear;

- diene resins of cyclopentanediene dimers such as those derived from the polymerization of first monomers chosen from indene and styrene, and of second monomers chosen from cyclopentanediene dimers such as dicyclopentadiene, methyldicyclopentanediene and other pentanediene dimers, and mixtures thereof. These resins generally have a molecular weight ranging from 500 to 800 g/mol, for instance those sold under the reference Betaprene BR 100 by the company Arizona Chemical Co., Neville LX-685-125 and Neville LX-1000 by the company Neville Chem., Piccodiene 2215 by the company Hercules, Petro-Rez 200 by the company Lawter or Resinall 760 by the company Resinall Corp.;

- diene resins of isoprene dimers such as terpenic resins derived from the polymerization of at least one monomer chosen from a-pinene, β-pinene and limonene, and mixtures thereof. These resins can have a molecular weight ranging from 300 to 2000 g/mol. Such resins are sold, for example, under the names Piccolyte A1 15 and S125 by Hercules or Zonarez 7100 or Zonatac 105 Lite by Arizona Chem.

Mention may also be made of certain modified resins such as hydrogenated resins, for instance those sold under the name Eastotac C6-C20 Polyolefin by the company Eastman Chemical Co., under the reference Escorez 5300 by the company Exxon Chemicals, or the resins Nevillac Hard or Nevroz sold by the company Neville Chem., the resins Piccofyn A-100, Piccotex 100 or Piccovar AP25 sold by the company Hercules or the resin SP-553 sold by the company Schenectady Chemical Co.
According to one preferred embodiment, the hydrocarbon-based resin is chosen from indene hydrocarbon-based resins, aliphatic pentadiene resins, mixed resins of pentanediene and of indene, diene resins of cyclopentanediene dimers and diene resins of isoprene dimers, or mixtures thereof.

Preferably, the composition comprises at least one compound chosen from hydrocarbon-based resins as described previously, especially indene hydrocarbon-based resins and aliphatic pentadiene resins, or mixtures thereof. According to one preferred embodiment, the hydrocarbon-based resin is chosen from indene hydrocarbon-based resins.

According to one preferred embodiment, the resin is chosen from indene/methylstyrene/hydrogenated styrene copolymers.

In particular, use may be made of indene/methylstyrene/hydrogenated 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, the hydrocarbon-based resin is present in the composition according to the invention in a content ranging from 0.1 to 45% by weight, preferably from 0.5 to 30% by weight and better still from 1 to 20% by weight, more preferably from 1 to 10%, relative to the total weight of the composition.

Preferably, when the composition is in liquid form, the hydrocarbon-based resin is present in the composition according to the invention in a content ranging from 1% to 20% by weight and more preferentially ranging from 1% to 10% by weight relative to the total weight of the composition.

The weight ratio of the silsequioxane resin to the hydrocarbon-based resin is 1 or more.

Preferably, the weight ratio of the silsequioxane resin to the hydrocarbon-based resin is 2 or more.

Preferably, the weight ratio of the silsequioxane resin to the hydrocarbon-based resin is 4 or more.

More preferably, the weight ratio of the silsequioxane resin to the hydrocarbon-based resin is 7 or more.

More preferably, the weight ratio of the silsequioxane resin to the hydrocarbon-based resin is between 7 and 20.

According to a preferred embodiment, the composition comprise no hydrocarbon-based block copolymer comprising at least one styrene block and at least one block comprising units chosen from butadiene, ethylene, propylene, butylene and isoprene or a mixture thereof. Said hydrocarbon-based block copolymer may be hydrogenated or not

More particularly, the composition comprises no hydrocarbon-based block copolymer is a copolymer, optionally hydrogenated, containing styrene blocks and ethylene/C3-C4 alkylene blocks.
According to one preferred embodiment, the composition according to the invention is free from diblock copolymer, optionally hydrogenated. Preferably the composition is free from diblock copolymers chosen from styrene-ethylene/propylene copolymers, styrene-ethylene/butadiene copolymers and styrene-ethylene/butylene copolymers. Such diblock copolymers are for example those sold under the name Kraton® G170 IE by the company Kraton Polymers.

According to another preferred embodiment, the composition according to the invention is free from triblock copolymer, optionally hydrogenated. Preferably the composition is free from triblocks copolymer chosen from styrene-ethylene/propylene-styrene copolymers, styrene-ethylene/butadiene-styrene copolymers, styrene-isoprene-styrene copolymers and styrene-butadiene-styrene copolymers. Such triblock polymers are for example those sold under the names Kraton® G1650, Kraton® G1652, Kraton® D1101, Kraton® D1102 and Kraton® D1160 by the company Kraton Polymers.

NON VOLATILE SILICONE OIL

The composition according to the invention comprises at least one non volatile silicone oil.

The term "oil" means a water-immiscible non-aqueous compound that is liquid at room temperature (25°C) and at atmospheric pressure (760 mmHg).

The silicone oils that may be used according to the invention are non-volatile.

In particular, the non-volatile silicone oils that may be used in the invention preferably have a viscosity at 25°C comprised between 9cSt and 800 000 cSt, preferably less than or equal to 600 000 cSt and preferably less than or equal to 500 000 cSt. The viscosity of these silicone oils may be measured according to standard ASTM D-445.

The term "non-volatile oil" means an oil whose vapour pressure at room temperature and atmospheric pressure is non-zero and less than 0.02 mmHg (2.66 Pa) and better still less than 10⁻⁷ mmHg (0.13 Pa).

The non-volatile silicone oil that may be used in the invention may be chosen especially from silicone oils especially with a viscosity at 25°C of greater than or equal to 9 centistokes (cSt) (9 x 10⁶ m²/s) and preferably less than 800 000 cSt, preferably between 50 and 600 000 cSt and preferably between 100 and 500 000 cSt. The viscosity of this silicone oil may be measured according to standard ASTM D-445.

Among these silicone oils, two types of oil may be distinguished, according to whether or not they contain phenyl.

1. Non-Phenylated Non Volatile silicone oil

According to a first embodiment, the non-volatile silicone oil is a non-phenylated silicone oil.

The expression "non phenylated silicone oil" or "non phenyl silicone oil" means a silicon oil having no phenyl substituent.
Representative examples of these non-volatile non-phenylated silicone oils that may be mentioned include polydimethylsiloxanes; alkyl dimethicones; vinyl methyl methicones; and also silicones modified with optionally fluorinated aliphatic groups, or with functional groups such as hydroxyl, thiol and/or amine groups.

According to a first embodiment, the non volatile silicon oil is a non phenylated oil, preferably chosen from polydimethylsiloxanes; alkyl dimethicones; vinyl methyl methicones; and also silicones modified with optionally fluorinated aliphatic groups, or with functional groups such as hydroxyl, thiol and/or amine groups.

The non volatile non phenylated silicon oil is preferably chosen from dimethicone oils, preferably chosen from polydimethylsiloxanes; alkyl dimethicones.

"Dimethicone" (INCI Name) corresponds to polydimethylsiloxane (chemical name).

Non-phenylated non-volatile silicone oils can be chosen from:
- non-volatile polydimethylsiloxanes (PDMS),
- PDMSs comprising alkyl or alkoxy groups, which are pendent and/or at the end of the silicone chain, these groups each containing from 2 to 24 carbon atoms, such as cetyl dimethicone sold under the commercial reference ABEL WAX 9801 from Evonik Goldschmidt,
- PDMSs comprising aliphatic and/or aromatic groups, or functional groups such as hydroxyl, thiol and/or amine groups,
- polyalkylmethylsiloxanes such as cetyl dimethicone sold under the commercial reference ABIL WAX 9801 from Evonik Goldschmidt, polyalkylmethylsiloxane optionally substituted with a fluorinated group, such as polymethyltrifluoropropyl dimethylsiloxanes,
- polyanalkylmethylsiloxanes substituted with functional groups such as hydroxyl, thiol and/or amine groups,
- polysiloxanes modified with fatty acids, fatty alcohols or polyoxyalkylenes, and mixtures thereof.

According to one embodiment, a composition according to the invention contains at least one non-phenylated linear silicone oil.

These non-volatile non phenylated linear silicone oils may be chosen from polydimethylsiloxanes; alkyl dimethicones; vinyl methyl methicones; and also silicones modified with optionally fluorinated aliphatic groups, or with functional groups such as hydroxyl, thiol and/or amine groups.

The non-phenylated linear silicone oil may be chosen especially from the silicones of formula (I):
in which:

\[ R_1, R_2, R_3 \text{ and } R_6 \text{ are, together or separately, an alkyl radical containing 1 to 6 carbon atoms,} \]
\[ R_3 \text{ and } R_4 \text{ are, together or separately, an alkyl radical containing from 1 to 6 carbon atoms, a vinyl} \]
\[ \text{radical, an amine radical or a hydroxyl radical,} \]
\[ X \text{ is an alkyl radical containing from 1 to 6 carbon atoms, a hydroxyl radical or an amine radical,} \]
\[ n \text{ and } p \text{ are integers chosen so as to have a fluid compound, in particular whose viscosity at } 25^\circ \text{C} \]
\[ \text{is between 9 centistokes (cSt) (9 x 10}^{-m} \text{m}^2/\text{s} \text{ and 800 000 cSt).} \]

As non-volatile non phenylated silicone oils that may be used according to the invention, mention may be made of those for which:
- the substituents \( R_i \) to \( R_6 \) and \( X \) represent a methyl group, and \( n \) and \( p \) are such that the viscosity is 500 000 cSt, such as the product sold under the name SE30 by the company General Electric, the product sold under the name AK 500000 by the company Wacker, the product sold under the name Mirasil DM 500 000 by the company Bluestar, and the product sold under the name Dow Corning 200 Fluid 500 000 cSt by the company Dow Corning,
- the substituents \( R_1 \) to \( R_6 \) and \( X \) represent a methyl group, and \( n \) and \( p \) are such that the viscosity is 60 000 cSt, such as the product sold under the name Dow Corning 200 Fluid 60000 CS by the company Dow Corning, and the product sold under the name Wacker Belsil DM 60 000 by the company Wacker,
- the substituents \( R_1 \) to \( 3/4 \) and \( X \) represent a methyl group, and \( n \) and \( p \) are such that the viscosity is 350 cSt, such as the product sold under the name Dow Corning 200 Fluid 350 CS by the company Dow Corning,
- the substituents \( R_i \) to \( 3/4 \) represent a methyl group, the group \( X \) represents a hydroxyl group, and \( n \) and \( p \) are such that the viscosity is 700 cSt, such as the product sold under the name Baysilone Fluid T0.7 by the company Momentive.

According to a particular embodiment, the composition compositions comprises a polyalkylmethylsiloxanes, such as cetyltrimethicone sold under the commercial reference ABIL WAX 9801 from Evonik Goldschmidt. Preferably, the composition comprises from 0.1 to 10% polyalkylmethylsiloxanes, such as cetyltrimethicone.

2. Non volatile Phenylated silicone oil

According to one second most preferred embodiment variant, a composition according to the invention contains at least one non-volatile phenylated silicone oil.

The expression "phenylated silicone oil" or "phenyl silicone oil" means a silicone oil having at least one phenyl substituent.
The non volatile phenylated silicone oil may be chosen from:

a) the phenyl silicone oils corresponding to the following formula (I):

\[
\begin{array}{c}
\text{R} \\
\text{Si} \quad \text{O} \\
\text{R} \\
\text{Si} \\
\text{R} \\
\text{Si} \quad \text{O} \\
\text{R} \\
\end{array}
\]

(I)

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 phenyl silicone oil comprises at least three phenyl groups, for example at least four, at least five or at least six.

b) the phenyl silicone oils corresponding to the following formula (II):

\[
\begin{array}{c}
\text{R} \\
\text{Si} \quad \text{O} \\
\text{R} \\
\text{Si} \\
\text{R} \\
\text{Si} \\
\text{O} \\
\text{R} \\
\end{array}
\]

(II)

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 said organopolysiloxane comprises at least three phenyl groups, for example at least four or at least five. Mixtures of the phenyl organopolysiloxanes described previously may be used. Examples that may be mentioned include mixtures of triphenyl, tetraphenyl or pentaphenyl organopolysiloxanes.

c) the phenyl silicone oils corresponding to the following formula (III):

\[
\begin{array}{c}
\text{Ph} \\
\text{Si} \quad \text{O} \\
\text{Ph} \\
\text{Si} \\
\text{Ph} \\
\text{Si} \quad \text{O} \\
\text{Ph} \\
\text{Me} \\
\end{array}
\]

(III)

in which Me represents methyl, Ph represents phenyl.

Such a phenyl silicone oil is preferably trimethyl pentaphenyl trisiloxane, or Tetramethyl Tetraphenyl Tnsiloxane. Such oils are especially manufactured by Dow Corning under the reference PH-1555 HRI or Dow Corning 555 Cosmetic Fluid (chemical name: 1,3,5-trimethyl-1,3,5,5-pentaphenyl trisiloxane; INCI name: trimethyl pentaphenyl trisiloxane), or Tetramethyl Tetraphenyl Trisiloxane sold under the reference Dow Corning 554 Cosmetic Fluid by Dow Corning may also be used.

d) the phenyl silicone oils corresponding to the following formula (TV):
in which Me represents methyl, y is between 1 and 1,000 and X represents -CH2-CH(CH3)(Ph).

e) the phenyl silicone oils corresponding to formula (V) below:

\[
\begin{align*}
\text{Me} & \quad \text{Si} \quad \text{O} \quad \text{Si} \quad \text{y} \quad \text{Si} \quad \text{O} \quad \text{Si} \quad \text{(CH}_3)_3 \\
\text{Me} & \quad \text{Me} \quad \text{Me} \quad \text{OR'} \quad \text{Me} \quad \text{Me} \quad \text{Ph} \quad \text{z}
\end{align*}
\]

(V)

in which Me is methyl and Ph is phenyl, OR represents a group -OSiMe3 and y is 0 or ranges between 1 and 1000, and z ranges between 1 and 1000. In particular, y and z are such that compound (V) is a non-volatile oil.

According to a first embodiment, y ranges between 1 and 1000. Use may be made, for example, of trimethylsiloxyphenyl dimethicone, sold especially under the reference Belsil PDM 1000 sold by the company Wacker.

According to a second embodiment, y is equal to 0. Use may be made, for example, of phenyl trimethylsiloxy trisiloxane, sold especially under the reference Dow Corning 556 Cosmetic Grade Fluid (DC556).

f) the phenyl silicone oils corresponding to formula (VI) below, and mixtures thereof:

\[
\begin{align*}
\text{R}_1 & \quad \text{Si} \quad \text{O} \quad \text{Si} \quad \text{O} \quad \text{Si} \quad \text{O} \quad \text{Si} \quad \text{O} \quad \text{Si} \quad \text{R}_5 \\
\text{R}_2 & \quad \text{R}_3 \quad \text{R}_4 \quad \text{R}_5 \quad \text{R}_6 \quad \text{R}_7 \quad \text{R}_8 \quad \text{R}_9 \quad \text{R}_{10} \quad \text{R}_{11} \\
\text{p} & \quad \text{q} \quad \text{n} \quad \text{m}
\end{align*}
\]

(VI)

in which:
- R1 to R10, independently of each other, are saturated or unsaturated, linear, cyclic or branched C1-C30 hydrocarbon-based radicals,
- 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. Preferably, the sum m+n+p+q is between 1 and 900 and better still between 1 and 800. Preferably, q is equal to 0.
Preferably, \( R_t \) to \( R_{10} \), independently of each other, represent a saturated or unsaturated linear or branched \( \text{Q-C30} \), hydrocarbon radical, preferably saturated, and especially \( \text{C1-C12} \) hydrocarbon-based radical, in particular \( \text{C}_3\text{-C}_{16} \) and more particularly \( \text{C}_4\text{-C}_{10} \), or a monocyclic or polycyclic \( \text{C}_6\text{-C}_{14} \) and especially \( \text{C}_{10}\text{-C}_{13} \) aryl radical, or an aralkyl radical. Preferably, \( R_t \) to \( R_{10} \) may each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or alternatively a phenyl, tolyl, benzyl or phenethyl radical. \( R_t \) to \( R_{10} \) may especially be identical, and in addition may be a methyl radical.

g) the phenyl silicone oils corresponding to formula (VH) below, and mixtures thereof:

\[
\begin{align*}
\text{H}_2\text{C} & \quad \text{Si} - \text{O} \\
& \quad \text{Si} - \text{O} \\
& \quad \text{R}_1 \quad \text{R}_2 \\
& \quad \text{R}_3 \\
& \quad \text{R}_4 \\
& \quad \text{R}_5 \\
& \quad \text{R}_6 \\
& \quad \text{Si} - \text{O} \\
& \quad \text{Si} - \text{O} \\
& \quad \text{Si} - \text{CH}_3 \\
\end{align*}
\]

(\text{VII})

in which:
- \( R_1 \) to \( R_6 \), independently of each other, are saturated or unsaturated, linear, cyclic or branched \( \text{C}_1\text{-C}_{30} \) hydrocarbon-based radicals, preferably \( R_1 \) to \( R_6 \) are a \( \text{C1-C30} \) alkyl radical, an aryl radical or an aralkyl radical
- \( m, n \) 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 \( R_e \), independently of each other, represent a saturated or unsaturated linear or branched \( \text{C}_1\text{-C30} \) hydrocarbon radical, preferably saturated, and especially \( \text{CrC}_{12} \) hydrocarbon-based radical, in particular \( \text{C}_3\text{-C}_{16} \) and more particularly \( \text{C}_4\text{-C}_{10} \), or a monocyclic or polycyclic \( \text{C}_6\text{-C}_{14} \) and especially \( \text{C}_{10}\text{-C}_{13} \) aryl radical, or an aralkyl radical. Preferably, \( R_1 \) to \( R_e \) may each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or alternatively a phenyl, tolyl, benzyl or phenethyl radical.

\( R_1 \) to \( R_6 \) may especially 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 apply, in formula (VII).

h) the phenyl silicone oils corresponding to the following formula, and mixtures thereof:

\[
\begin{align*}
\text{X} - \text{Si} - \text{O} & \quad \text{Si} - \text{O} \\
& \quad \text{Si} - \text{O} \\
& \quad \text{Si} - \text{X} \\
& \quad \text{R}_1 \\
& \quad \text{R}_2 \\
& \quad \text{R}_3 \\
& \quad \text{R}_4 \\
& \quad \text{R}_5 \\
& \quad \text{R}_6 \\
\end{align*}
\]

(\text{IX})

in which:
Ri, R2, R3 and Rk are, together or separately, an alkyl radical containing 1 to 6 carbon atoms, R3 and R4 are, together or separately, an alkyl radical containing from 1 to 6 carbon atoms or an aryl radical, with the proviso that at least one from R3 and R4 is a phenyl radical, X is an alkyl radical containing from 1 to 6 carbon atoms, a hydroxyl radical or a vinyl radical, n and p being integer superior 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.

i) and mixture thereof.

As preferred non-volatile silicone oils, examples that may be mentioned include silicone oils such as:
- phenyl silicone oil, preferably chosen from: Tetramethyl Tetraphenyl Trisiloxane (such as as PH-1554 HRI or Dow Corning 554 Cosmetic Fluid from Dow Corning), TrimethylsUoxyphenyltrimethicone (for instance Belsil PDM 1000 from the company Wacker (cf. formula (V) above)), phenyl trimethicones (such as the phenyl trimethicone sold under the trade name DC556 by Dow Corning), phenyl dimethicones, phenyltrimethylsiloxydiphenylsiloxanes, diphenyl dimethicones (such as KF-54 from Shin Etsu (400 cSt), KF54HV from Shin Etsu (5000 cSt), KF-50-300CS from Shin Etsu (300 cSt), KF-53 from Shin Etsu (175cSt), KF-50-100CS from Shin Etsu (100 cSt), diphenylmethyldiphenyltrisiloxanes, 2-phenylethyl trimethylsiloxysilicates, trimethylpentaphenyl trisiloxane (such as the product sold under the name Dow Corning PH-1555 HRI Cosmetic fluid by Dow Corning) (cf. formula (IH) above), diphenylsiloxy phenyltrimethicone (such as KF56 A from Shin Etsu),
- non-volatile polydimethylsiloxanes (PDMS), polydimethylsiloxanes comprising alkyl or alkoxy groups, which are pendent and/or at the end of the silicone chain, these groups each containing from 2 to 24 carbon atoms,
- and mixtures thereof.

The phenyl silicones are more preferably chosen from:
- phenyl trimethicones,
- Tetramethyl Tetraphenyl Trisiloxane,
- diphenylsiloxysiloxanepentaphenyltrimethicone,
- trimethylpentaphenyl trisiloxane,
- phenyltrimethicones,
- phenyltrimethylsiloxydiphenylsiloxanes,
- diphenyl dimethicones,
- diphenylmethyldiphenyltrisiloxanes and
- 2-phenylethyl trimethylsiloxysilicates,
- and mixtures thereof.

More particularly, the phenyl silicones are chosen from:
- phenyl trimethicones,
- diphenylsUoxyphenyltrimethicone,
- diphenylsUoxyphenyldimethicone,
- trimethylpentaphenyl trisiloxane,
- phenyl dimethicones,
- phenyltrimethylsiloxydiphenylsiloxanes,
- diphenyl dimethicones,
- diphenylmethylidiphenyltrisiloxanes and
- 2-phenylethyl Iriniethylsiloxysilicates,
- and mixtures thereof.

Preferably, the weight-average molecular weight of the non-volatile phenyl silicone oil according to the invention ranges from 500 to 10 000 g/mol.

**Non Volatile Phenyl silicone oil having at least a dimethicone part**

According to a first preferred embodiment, the non volatile phenylated silicone oil is chosen from phenyl dimethicone oil(s), (which means a phenyl silicone oil having at least a dimethicone part). Preferably, non volatile silicone oil is chosen from oils corresponding to formula (VII)

\[ R_1 \text{SiO}_2 [\text{H}_2 \text{C} \text{SiO}_{m+n} \text{SiCH}_3] \]

wherein \( R_1 \) to \( R_6 \), \( m \), \( n \) and \( p \), are as defined before.

A) According to a first embodiment, \( m=0 \) and \( n \) and \( p \) are independently of each other, integers between 1 and 100, in formula (VII). Preferably \( R_1 \) to \( R_6 \) are methyl radicals. According to this embodiment, the silicone oil is preferably chosen from diphenyl dimethicone such as KF-54 from Shin Etsu (400 cSt), KF54HV from Shin Etsu (5000 cSt), KF-50-300CS from Shin Etsu (300 cSt), KF-53 from Shin Etsu (175cSt), KF-50-100CS from Shin Etsu (100 cSt).

B) According to a second embodiment, \( p \) is between 1 and 100 in formula (VH), the sum \( n+m \) is between 1 and 100, and \( n=0 \), in formula (VET). As silicone oils of formula (VII) wherein \( n=0 \) and \( R_i \) to \( R_6 \) are methyl radicals, it is especially possible to use a silicone oil chosen from trimethylsiloxysiloxymethylsiloxane such as Belsil PDM 1000 from Wacker.

According to a first preferred embodiment, the silicon oil is a phenyl silicone oil having at least a dimethicone part, and is preferably chosen from:
- diphenyl dimethicone such as KF-54 from Shin Etsu (400 cSt), KF54HV from Shin Etsu (5000 cSt), KF-50-300CS from Shin Etsu (300 cSt), KF-53 from Shin Etsu (175cSt), KF-50-100CS from Shin Etsu (100 cSt);
- trimethyl siloxysiloxymethyltrimethicone, such as Belsil PDM 1000 from Wacker,
- trimethyl pentaphenyl trisiloxane such as PH-1555 HRI or Dow Corning 555 Cosmetic Fluid from Dow Coming,
- and mixture thereof.

5 Non Volatile Phenyl silicone oil having no dimethicone part

According to a second embodiment, the silicone oil is a phenyl silicone oil having no dimethicone part. The non volatile phenylated silicone oil having no dimethicone part may be chosen from:

a) the phenyl silicone oils corresponding to the following formula (I):

\[
R_1Si-O-SiR_2-O-SiR_3
\]

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 phenyl silicone oil comprises at least three phenyl groups, for example at least four, at least five or at least six.

b) the phenyl silicone oils corresponding to the following formula (II):

\[
R_1Si-O-SiR_2-O-SiR_3
\]

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 said organopolysiloxane comprises at least three phenyl groups, for example at least four or at least five. Mixtures of the phenyl organopolysiloxanes described previously may be used. Examples that may be mentioned include mixtures of triphenyl, tetraphenyl or pentaphenyl organopolysiloxanes.

c) the phenyl silicone oils corresponding to the following formula (III):

\[
\text{Me}Si-O-Si-O-SiMe
\]

in which Me represents methyl, Ph represents phenyl. Such a phenyl silicone is especially manufactured 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-pentaphenyl trisiloxane; INCI name: trimethyl pentaphenyl trisiloxane), or Tetramethyl Tetraphenyl Trisiloxane sold under the reference Dow Corning 554 Cosmetic Fluid by Dow Corning may also be used.

e) the phenyl silicone oils corresponding to formula (V') below:
in which Me is methyl and Ph is phenyl, OR' represents a group -OSiMe₃ and y is 0 and z ranges between 1 and 1000, in particular, z is such that compound (V') is a non-volatile oil.

According to a second embodiment, y is equal to 0. Use may be made, for example, of phenyl trimethylsiloxy trisiloxane, sold especially under the reference Dow Corning 556 Cosmetic Grade Fluid (DC556), g) the phenyl silicone oils corresponding to formula (VIII) below, and mixtures thereof:

\[
\text{Me-Si-CH}_3\quad \text{Me-Si-CH}_3\quad \text{Me-Si-CH}_3
\]

(VIII)

where:

- R, independently of each other, are saturated or unsaturated, linear, cyclic or branched C₁-C₃₀ hydrocarbon-based radicals, preferably R is a C₁-C₃₀ alkyl radical, an aryl radical or an aralkyl radical,
- 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, independently of each other, represent a saturated or unsaturated linear or branched C₁-C₃₀ hydrocarbon radical, preferably saturated, and especially C₁-C₁₂ hydrocarbon-based radical, in particular C₃-C₆ and more particularly C₄-C₁₀, or a monocyclic or polycyclic C₆-C₁₄ and especially C₆-C₁₂ aryl radical, or an aralkyl radical. Preferably, R may each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or alternatively a phenyl, tolyl, benzyl or phenethyl radical. R may especially 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 apply, in formula (VII').

According to a 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 methyl radical.

According to one embodiment, a phenyl silicone oil of formula (VIE) 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.

According to this embodiment, the non volatile phenyl silicone oil is preferably chosen from phenyl trimethicones; such as DC556 from Dow Corning (22.5 cSt), the oil diphenylsiloxy
phenyltrimethicone such as KF56 A from Shin Etsu, the oil Silbione 70663 V30 from Rhone-Poulenc (28 cSt). The values in parentheses represent the viscosities at 25°C.

According to this embodiment, when n=0, said silicone oil is preferably DC556 from Dow Corning, and when m and n are between 1 and 100, said said silicone oil is preferably KF56 A from Shin Etsu.

Preferably the non volatile phenylated silicone oil having no dimethicone part may be chosen from:
- phenyl trimethylsiloxo trisiloxane, phenyl trimethicones: such as DC556 from Dow Corning,
- Tetramethyl Tetraphenyl Trisiloxane, such as PH-1554 HRI or Dow Corning 554 Cosmetic Fluid from Dow Corning,
- diphenylsiloxo phenyltrimethicone such as KF56 A from Shin Etsu, the oil Silbione 70663V30 from Rhone-Poulenc,
- trimethyl pentaphenyl trisiloxane such as PH-1 555 HRI or Dow Corning 555 Cosmetic Fluid from Dow Corning,
- and mixture thereof.

Preferably, the composition according to the invention advantageously contains from 17% to 80% by weight, preferably from 5% to 60% by weight or even from 21% to 50% by total weight of non volatile silicone(s) oil(s) relative to the total weight of the said composition.

It should be noted that, among the abovementioned silicone oils, the phenyl silicone oils prove to be particularly advantageous. They can especially impart a good level of gloss to the deposit on the skin or the lips made with the composition according to the invention, without generating any tack, and enable forming a non transfer deposit in association with the non volatile hydrocarbonated oil.

In particular, a composition according to the invention for caring for and/or making up the lips and more particularly of lipstick or lipgloss type may comprise from 17% to 80% by weight of non volatile silicone oil(s) according to the invention relative to the total weight of the composition.

Advantageously, a composition according to the invention for caring for and/or making up the lips and more particularly of lipstick or lipgloss type may comprise from 5% to 60% by weight of non volatile silicone oil(s) according to the invention relative to the total weight of the composition.

Advantageously, a composition according to the invention for caring for and/or making up the lips and more particularly of lipstick or lipgloss type may comprise from 21% to 50% by weight of non volatile silicone oil(s) according to the invention relative to the total weight of the composition.

According to one particular embodiment, especially in the case of a lip makeup composition, it may comprise more than 10% by weight of silicone compound(s) according to the invention relative to the total weight of the composition.

Preferably, the composition according to the invention comprises a mixture of at least two different non volatile phenyl silicone oils. Preferably, the composition according to the invention comprises at least a non volatile phenyl silicone oil having at least a dimethicone part, and at least a non volatile silicone oil having no dimethicone part.
Preferably, the weight ratio of the non volatile phenyl silicone oil having at least a dimethicone part to the non volatile silicone oil having no dimethicone part is above 0.5, more preferably comprise between 0.5 and 2.5.

More preferably, the weight ratio of the non volatile phenyl silicone oil having at least a dimethicone part to the non volatile silicone oil having no dimethicone part is above 0.80.

More preferably, the weight ratio of the non volatile phenyl silicone oil having at least a dimethicone part to the non volatile silicone oil having no dimethicone part is above 1, and more preferably comprised between 1 and 2.5.

**NON VOLATILE APOLAR HYDROCARBONATED OIL:**

The composition according to the invention comprises at least one non volatile apolar hydrocarbonated oil (also called "hydrocarbon-based" oil).

For the purposes of the present invention, the term "apolar oil" means an oil whose solubility parameter at 25°C, $\delta_\alpha$, is equal to 0 $(J/cm^3)^{1/2}$.

The definition and calculation of the solubility parameters in the Hansen three-dimensional solubility space are described in the article by CM. Hansen: "The three dimensional solubility parameters", J. Paint Technol. 39, 105 (1967).

According to this Hansen space:
- $\frac{3}{4}$ characterizes the London dispersion forces derived from the formation of dipoles induced during molecular impacts;
- $\delta_\rho$ characterizes the Debye interaction forces between permanent dipoles and also the Keesom interaction forces between induced dipoles and permanent dipoles;
- $\frac{3}{4}$ characterizes the specific interaction forces (such as hydrogen bonding, acid/base, donor/acceptor, etc.); and
- $\delta_\alpha$ is determined by the equation: $\delta_\alpha = (\delta_\rho^2 + \frac{3}{4} \delta_\kappa^2)^{1/2}$.

The parameters $\delta_\rho$, $\frac{3}{4}$, $\frac{3}{4}$, and $\delta_\alpha$ are expressed in $(J/cm^3)^{1/2}$.

The term "hydrocarbon-based oil" (or "hydrocarbonated oil", or "hydrocarbon oil") means an oil formed essentially from, or even constituted by, carbon and hydrogen atoms, and optionally oxygen and nitrogen atoms, and not containing any silicon or fluorine atoms. It may contain alcohol, ester, ether, carboxylic acid, amine and/or amide groups.

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

Preferably, the non-volatile apolar hydrocarbon-based oil may be chosen from linear or branched hydrocarbons of mineral or synthetic origin.
In particular said -volatile apolar hydrocarbon-based oil may be chosen from:
- liquid paraffin or derivatives thereof,
- squalane,
- isoeicosane,
- naphthalene oil,
- polybutylenes such as Indopol H-100 (molar mass or MW = 965 g/mol), Indopol H-300 (MW = 1340 g/mol) and Indopol H-1500 (MW = 2160 g/mol) sold or manufactured by the company Amoco,
- polyisobutenes,
- hydrogenated polyisoburylenes such as Parleam® sold by the company Nippon Oil Fats, Panalane H-300 E sold or manufactured by the company Amoco (MW = 1340 g/mol), Viseal 20000 sold or manufactured by the company Synteal (MW = 6000 g/mol) and Rewopal PIB 1000 sold or manufactured by the company Witco (MW = 1000 g/mol), or alternatively Parleam Lite sold by NOF Corporation,
- decene/butene copolymers, polybutene/polyisobutene copolymers, especially Indopol L-14,
- polydecenes and hydrogenated polydecenes such as: Puresyn 10 (MW = 723 g/mol) and Puresyn 150 (MW = 9200 g/mol) sold or manufactured by the company Mobil Chemicals, or alternatively Puresyn 6 sold by ExxonMobil Chemical,
- and mixtures thereof.

Preferably, the composition according to the invention comprises at least one non volatile hydrocarbon-based apolar oil, preferably chosen from polybutenens, polyisobutenes, hydrogenated polyisobutenes, polydecenes and/or hydrogenated polydecenes, and mixtures thereof.

A composition according to the invention may comprise a content of non volatile apolar hydrocarbon oil ranging from 10% to 80%, preferably from 14% to 70% by weight and preferably from 15% to 60% by weight, relative to the total weight of the composition.

Preferably the composition according to the invention may comprise a content of non volatile apolar hydrocarbon oil ranging from 20% to 60% by weight, relative to the total weight of the composition.

Preferably the composition according to the invention may comprise a content of non volatile apolar hydrocarbon oil ranging from 25% to 50% by weight, relative to the total weight of the composition.

Preferably, the weight ratio of the total non volatile apolar hydrocarbonated oil(s) to the total non volatile silicone oil(s) comprised between 0,1 and 10, more preferably comprised between 0,1 and 5, and preferably comprised between 0,1 and 1.

Preferably, the weight ratio of the total non volatile apolar hydrocarbonated oil(s) to the total non volatile silicone oil(s) is comprised between 0,1 and 10, more preferably comprised between 0,1 and 5, and preferably comprised between 0,1 and 1.

Preferably, the weight ratio of the total total non volatile silicone oil(s) to the non volatile apolar hydrocarbonated oil(s) is comprised between 0,1 and 10, more preferably comprised between 0,1 and 5.
Preferably, the weight ratio of the total non volatile silicone oil(s) to the non volatile apolar hydrocarbonated oil(s) is comprised between 0.1 and 1.8, and more preferably comprised between 0.2 and 1.59.

A cosmetic makeup and/or care composition according to the invention also comprises a cosmetically acceptable medium that may comprise the usual ingredients, as a function of the intended use of the composition.

The composition according to the invention may also comprise at least one additional compound, preferably chosen from a polar hydrocarbonated non volatile oil, and or a fatty pasty compound, and/or a filler, and/or a colouring agent, and/or mixture thereof.

**ADDITIONAL FATTY PHASE**

According to one embodiment, the composition according to the invention may comprise, besides said non volatile silicone oil and said non volatile apolar hydrocarbonated oil, an additional liquid fatty phase.

The additional liquid fatty phase may represent from 0.1% to 98% by weight relative to the total weight of the composition.

It is understood that this weight percentage of liquid fatty phase takes into account the weight of oil used for the formulation of the associated silsesquioxane resin, if present.

In particular, a composition according to the invention and/or used in a composition according to the invention may comprise from 0.1% to 95% by weight of an additional liquid fatty phase relative to its total weight.

More particularly, a composition according to the invention and/or used in a composition according to the invention may comprise from 0.5% to 90% by weight of an additional liquid fatty phase relative to its total weight.

**Additional non volatile apolar hydrocarbonated oil:**

According to a preferred embodiment, the composition according to the invention comprises at least a non volatile polar hydrocarbon-based oil may be a polar hydrocarbon-based oil. For the purposes of the present invention, the term "polar oil" means an oil whose solubility parameter at 25°C, \( \delta_p \), is other than 0 (J/cm\(^3\))\(^{1/2}\).

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

In particular, the hydrocarbon-based non-volatile polar oil may be chosen from the list of oils below, and mixtures thereof:
- hydrocarbon-based plant oils such as liquid triglycerides of fatty acids containing from 4 to 10 carbon atoms, for instance heptanoic or octanoic acid triglycerides or jojoba oil;
- ester oils, preferably chosen from:
- fatty acid esters, in particular of 4 to 22 carbon atoms, and especially of octanoic acid, heptanoic acid, lanolic acid, oleic acid, lauric acid or stearic acid, for instance propylene glycol dioctanoate, propylene glycol monoisostearate or neopentyl glycol diheptanoate;
- synthetic esters, for instance the oils of formula $R_1\text{COOR}_2$ in which $R_1$ represents a linear or branched fatty acid residue comprising from 4 to 40 carbon atoms and $R_2$ represents a hydrocarbon-based chain, which is especially branched, containing from 4 to 40 carbon atoms, on condition that $R_1 + R_2 \geq 16$, for instance purcellin oil (cetostearyl octanoate), isononyl isononanoate, C$_{12}$ to C$_{14}$ alkyl benzoate, 2-ethylhexyl palmitate, octyldodecyl neopentanoate, 2-octyldodecyl stearate, 2-octyldodecyl erucate, oleyl erucate, isostearyl isostearate, 2-octyldodecyl benzoate, alcohol or polylcohol octanoates, decanoates or ricinoleates, isopropyl myristate, isopropyl palmitate, butyl stearate, hexyl laurate, 2-ethylhexyl palmitate, 2-hexyldecyl laurate, 2-octyldodecyl palmitate, 2-octyldodecyl myristate or 2-diethylhexyl succinate; preferably, the preferred synthetic esters $R_1\text{COOR}_2$ in which $R_1$ represents a linear or branched fatty acid residue comprising from 4 to 40 carbon atoms and $R_2$ represents a hydrocarbon-based chain, which is especially branched, containing from 4 to 40 carbon atoms are such that $R_1$ and $R_2$:
- linear fatty acid esters with a total carbon number ranging from 35 to 70, for instance pentaerythritol tetrapelargonate (MW = 697 g/mol);
- hydroxylated esters, preferably with a total carbon number ranging from 35 to 70, for instance polyglyceryl-2 triisostearate (MW = 965 g/mol), isostearyl lactate, octyl hydroxystearate, octyldodecyl hydroxystearate, disostearyl malate, glyceryl stearate; diethylene glycol dioisostearate;
- esters of aromatic acids and of alcohols comprising 4 to 22 atoms, such as tridecyl trimellitate (MW = 757 g/mol);
- C$_{24}$-C$_{28}$ esters of branched fatty alcohols or fatty acids such as those described in patent application EP-A-0 955 039, and especially trioarachidyl citrate (MW = 1033.76 g/mol), pentaerythrityl tetraisostearoate (MW = 697 g/mol), isostearyl lactate (MM = 891 g/mol), glyceryl tris(2-decyldodecanate (MW = 1143 g/mol), pentaerythrityl tetraisostearate (MW = 1202 g/mol), polyglyceryl-2 tetraisostearate (MW = 1232 g/mol) or pentaerythrityl tetraryls(2-decyl)tetradecanoate (MW = 1538 g/mol);
- polyesters resulting from the esterification of at least one hydroxylated carboxylic acid triglyceride 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;
- esters of a diol dimer and of a diacid dimer of general formula HO-R$^1$-OOC-R$^2$COO-R$^2$-OH, in which:
  R$^1$ represents a diol dimer residue obtained by hydrogenation of dilinoleic diacid,
  R$^2$ represents a hydrogenated dilinoleic diacid residue, and
  h represents an integer ranging from 1 to 9,
  especially the esters of dilinoleic diacids and of dilinoleyl diol dimers sold by the company Nippon Fine Chemical under the trade names Lusplan DD-DA5® and DD-DA7®,
- polyesters obtained by condensation of an unsaturated fatty acid dimer and/or trimer and of diol, such as those described in patent application FR 0 853 634, in particular such as dilinoleic acid and 1,4-butanediol. Mention may especially be made in this respect of the polymer sold by Biosynthis under the name Viscoplast 14436H (INCI name: dilinoleic acid/butanediol copolymer), or copolymers of polyols and of diacid dimers, and esters thereof, such as Hailuscent ISDA;
- fatty alcohols containing from 12 to 26 carbon atoms, which are preferably branched, for instance octyldodecanol, 2-butyloctanol, 2-hexyldecanol, 2-undecylpentadecanol and oleyl alcohol;
- \( \text{C}_{12-22} \) higher fatty acids, such as oleic acid, linoleic acid and linolenic acid, and mixtures thereof;
- oils of plant origin, such as sesame oil (820.6 g/mol);
- fatty acids containing from 12 to 26 carbon atoms, for instance oleic acid;
- dialkyl carbonates, the two alkyl chains possibly being identical or different, such as dicaprylyl carbonate sold under the name Cetiol CC® by Cognis; and
- vinylpyrrolidone copolymers such as the vinylpyrrolidone/l-hexadecene copolymer, Antaron V-216 sold or manufactured by the company ISP (MW = 7300 g/mol).

Preferably, the composition according to the invention comprises at least one non-volatile hydrocarbon oil chosen from:
- vinylpyrrolidone copolymers, preferably such as the vinylpyrrolidone/l-hexadecene copolymer;
- hydroxylated esters, preferably with a total carbon number ranging from 35 to 70, preferably chosen from polyglyceryl-2 triisostearate, isostearyl lactate, octyl hydroxystearate, octyldodecyl hydroxystearate, disostearyl malate, glyceryl stearate; diethylene glycol diisononanoate;
- oils from plant origin preferably chosen from liquid triglycerides of fatty acids;
- \( \text{C}_{24-28} \) esters of branched fatty alcohols or fatty acids preferably chosen from triisooarachidyl citrate (MW = 1033.76 g/mol), pentaeithrythrityl tetraisononanoate (MW = 697 g/mol), glyceryl triisostearate (MM = 891 g/mol), glyceryl tris(2-decyl)tetradecanoate (MW = 1143 g/mol), pentaerythrityl tetraisostearate (MW = 1202 g/mol), polyglyceryl-2 tetraisoctearate (MW = 1232 g/mol) or pentaerythrityl tetrakis(2-decyl)tetradecanoate (MW = 1538 g/mol).
- synthetic esters of formula \( \text{R}_1\text{COOR}_2 \) in which \( \frac{1}{4} \) represents a linear or branched fatty acid residue containing from 4 to 40 carbon atoms and \( \text{R}_2 \) represents a hydrocarbon-based chain that is especially branched, containing from 4 to 40 carbon atoms, provided that \( \frac{1}{4} + \text{R}_2 \geq 16; \)
- and mixtures thereof.

Preferably the composition comprises at least a polar oil(s), preferably in a content ranging from 1 to 80%, preferably from 2 to 70% by weight, relative to the total weight of the composition.

Preferably said composition comprises at least a polar oil(s), preferably in a content ranging from 5 to 60%, preferably from 10 to 50% by weight, relative to the total weight of the composition.

**VOLATILE OIL**

According to one preferred embodiment, the composition according to the invention may comprise a volatile oil.

Thus, a composition under consideration according to the invention may advantageously comprise one or more oils, which may be chosen especially from volatile hydrocarbon-based oils, volatile silicone oil and fluoro oils, and mixtures thereof.

For the purposes of the invention, the term "volatile oil" means an oil that is capable of evaporating on contact with keratin materials in less than one hour, at room temperature (25°C) and atmospheric pressure (760 mmHg). The volatile oil is a volatile cosmetic oil, which is liquid at room temperature,
especially having a non-zero vapour pressure, at room temperature and atmospheric pressure, in particular having a vapour pressure ranging from 0.13 Pa to 40 000 Pa (10⁻¹ to 300 mmHg), preferably ranging from 1.3 Pa to 13 000 Pa (0.01 to 100 mmHg) and preferentially ranging from 1.3 Pa to 1300 Pa (0.1 to 10 mmHg).

The oils may be of animal, plant, mineral or synthetic origin.

**Volatile fluoro oil**

The term "fluoro oil" means an oil comprising at least one fluorine atom.

The fluoro oils that may be used in the invention may be chosen from fluorosilicone oils, fluoro polyethers and fluorosilicones as described in document EP-A-847 752, and perfluoro compounds.

According to the invention, the term "perfluoro compounds" means compounds in which all the hydrogen atoms have been replaced with fluorine atoms.

According to one preferred embodiment, the fluoro oil according to the invention is chosen from perfluoro oils. As examples of perfluoro oils that may be used in the invention, mention may be made of perfluorodecalins and perfluoroperhydrophenanthrenes.

According to one preferred embodiment, the fluoro oil is chosen from perfluoroperhydrophenanthrenes, and especially the Fiflow® products sold by the company Creations Couleurs. In particular, use may be made of the fluoro oil whose INCI name is perfluoroperhydrophenanthrene, sold under the reference Fiflow 220 by the company F2 Chemicals.

**Volatile hydrocarbon oil**

According to a preferred embodiment, the composition according to the invention further comprises a volatile hydrocarbonated oil such as isododecane and/or isohexadecane.

Such compound is compatible with the non volatile hydrocarbonated and silicone oil and improve the spreadability during application and the transfer resistance of the deposit.

The term "hydrocarbon-based oil" (or "hydrocarbonated oil", or "hydrocarbon oil") means an oil formed essentially from, or even constituted by, carbon and hydrogen atoms, and optionally oxygen and nitrogen atoms, and not containing any silicon or fluorine atoms. It may contain alcohol, ester, ether, carboxylic acid, amine and/or amide groups.

The volatile hydrocarbon-based oils may be chosen from hydrocarbon-based oils containing from 8 to 16 carbon atoms, and especially C₈₋C₁₆ branched alkanes (also known as isoparaffins), for instance isododecane (also called 2,2,4,4,6-pentamethylheptane), isodecane and isohexadecane, and mixture thereof.
The volatile hydrocarbon-based oil may also be a linear volatile alkane containing 7 to 17 carbon atoms, in particular 9 to 15 carbon atoms and more particularly 11 to 13 carbon atoms. Mention may be made especially of n-nonadecane, n-decane, n-undecane, n-dodecane, n-tridecane, n-tetradecane, n-pentadecane and n-hexadecane, and mixtures thereof.

The term "hydrocarbon-based oil" is intended to mean an oil formed essentially, or even constituted, of carbon and hydrogen atoms, and optionally of oxygen and nitrogen atoms, and containing no silicon or fluorine atoms. It may contain alcohol, ester, ether, carboxylic acid, amine and/or amide groups.

According to one embodiment, a composition according to the invention also comprises at least isododecane and/or isohexadecane.

According to one embodiment, the composition is free of additional volatile hydrocarbonated oil other than isododecane and/or isohexadecane.

More particularly, the composition according to the invention contains between 0.1% and 20% by weight of volatile oil, preferably isododecane and/or isohexadecane, relative to its total weight.

Preferably, the composition according to the invention contains between 1% and 15% by weight of volatile oil, preferably of isododecane and/or isohexadecane, relative to its total weight.

As other volatile hydrocarbon-based solvents (oils) that can be used in the composition according to the invention, mention may also be made of ketones which are liquid at ambient temperature, such as methyl ethyl ketone or acetone; short-chain esters (containing from 3 to 8 carbon atoms in total), such as ethyl acetate, methyl acetate, propyl acetate or n-butyl acetate; ethers which are liquid at ambient temperature, such as diethyl ether, dimethyl ether or dichlorodiethyl ether; alcohols, and in particular linear or branched lower monoalcohols containing from 2 to 5 carbon atoms, for instance ethanol, isopropanol or n-propanol.

According to one preferred embodiment, the volatile oil has a flash point of greater than 65°C, and better still greater than 80°C. By way of example of such a volatile oil, mention may be made of isohexadecane.

Advantageously, the composition according to the invention comprises less than 30% and better still less than 20% by weight of volatile oil having a flash point of less than 80°C, relative to the total weight of the composition.

Volatile silicone oils

According to an embodiment, the compositions according to the invention may comprise at least one volatile silicone oil.

The term "silicone oil" is intended to mean an oil comprising at least one silicon atom, and in particular comprising Si-O groups.
The volatile silicone oil that may be used in the invention may be chosen from silicone oils especially having a viscosity \( \leq 8 \) centistokes (cSt) \( (8 \times 10^{-6} \text{m}^2/\text{s}) \) and preferably greater than 0.5 cSt.

The term "silicone oil" is intended to mean an oil comprising at least one silicon atom, and in particular comprising Si-0 groups.

The volatile silicone oil that can be used in the invention may be chosen from silicone oils having a flash point ranging from 40°C to 150°C, preferably having a flash point of greater than 55°C and less than or equal to 105°C, and preferentially ranging from 65°C to 95°C. The flash point is in particular measured according to ISO standard 3679.

The volatile silicone oil may be chosen from linear or cyclic silicone oils such as linear or cyclic polydimethylsiloxanes (PDMSs) having from 3 to 7 silicon atoms.

Volatile silicone oils that may more particularly be mentioned include decamethylcyclopentasiloxane sold especially under the name DC-245 by the company Dow Corning, dodecamethylocyclopentasiloxane sold especially under the name DC-246 by the company Dow Corning, octamethyltrisiloxane sold especially under the name DC-200 Fluid 1 cSt by the company Dow Corning, polydimethylsiloxanes such as decamethyltetrasiloxane sold especially under the name DC-200 Fluid 1.5 cSt by the company Dow Corning and DC-200 Fluid 5 cSt sold by the company Dow Corning, octamethylocyclohexasiloxane, heptamethylhexyltrisiloxane, heptamethyloctyltrisiloxane and dodecamethylpentasiloxane, octyl trimethicone, hexyl trimethicone, decamethylocyclopentasiloxane (cyclopentasiloxane or D5), octamethylocyclohexasiloxane (cyclopetra-dimethylsiloxane or D4), dodecamethylocyclohexasiloxane (D6), decamethyltetrasiloxane (L4), KF 96 A from Shin Etsu, and mixtures thereof.

**SOLID FATTY SUBSTANCES**

A composition according to the invention may preferably also comprise at least one solid fatty substance especially chosen from waxes and/or pasty fatty substances.

**Waxes**

According to a first embodiment, the composition is free of wax or contains less than 5% by weight of waxes, preferably less than 3%, relative to the total weight of the composition. Advantageously, according to this embodiment, the composition is liquid at room temperature. In particular, in case a makeup composition, for instance for the lips, the composition can be a lipgloss.

According to a second embodiment, the composition comprises at least one wax. According to this embodiment, preferably, the amount of wax(es) in the makeup and/or care composition according to the invention is between 0.5% and 30% by weight, especially from 1% to 20% by weight or even 2% to 15% by weight, relative to the total weight of the composition.
In particular, the presence of waxes is preferred when the composition according to the invention is solid at room temperature. In particular, in case a makeup composition, for instance for the lips, the composition can be a lipstick.

The term "wax" means a lipophilic compound that is solid at room temperature (25°C), with a reversible solid/liquid change of state, having a melting point of greater than or equal to 30°C, which may be up to 200°C. The waxes may be chosen from waxes of animal, plant, mineral or synthetic origin, and mixtures thereof. Mention may be made especially of hydrocarbon-based waxes, for instance beeswax, lanolin wax and Chinese insect waxes; rice bran wax, carnauba wax, candelilla wax, ouricury wax, alfalfa wax, berry wax, shellac wax, Japan wax and sumach wax; montan wax, orange wax, lemon wax, microcrystalline waxes, paraffins and ozokerite; polyethylene waxes, the waxes obtained by Fisher-Tropsch synthesis and waxy copolymers, and also esters thereof. 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, mention may be made especially of hydrogenated sunflower oil, hydrogenated castor oil, hydrogenated coconut oil, hydrogenated lanolin oil and bis(1,1,1-trimethylolpropane) tetrastearate. Mention may also be made of silicone waxes and fluoro waxes. The waxes obtained by hydrogenation of castor oil esterified with cetyl alcohol may also be used.

Advantageously, a composition according to the invention may comprise at least one wax, especially a hydrocarbon-based wax.

**Pasty fatty substances**

According to a first embodiment, the composition is free of pasty fatty substances.

According to a second preferred embodiment, the composition comprises at least one pasty fatty substance. According to this embodiment, preferably, the amount of pasty fatty substance in the makeup and/or care composition according to the invention is between 0.5% and 60% by weight, especially from 1% to 50% by weight or even 2% to 40% by weight, relative to the total weight of the composition.

The term "pasty", within the meaning of the present invention, is understood to mean a lipophilic fatty compound with a reversible solid/liquid change of state exhibiting, in the solid state, an anisotropic crystalline arrangement and comprising, at a temperature of 23°C, a liquid fraction and a solid fraction.

The term "pasty compound", within the meaning of the invention, is understood to mean a compound having a hardness at 20°C ranging from 0.001 to 0.5 MPa, preferably from 0.002 to 0.4 MPa.

The hardness is measured according to a method of penetration of a probe into a sample of compound and in particular using a texture analyser (for example, the TA-XT2i from Rheo) equipped with a stainless steel cylinder with a diameter of 2 mm. The hardness measurement is carried out at 20°C at the centre of 5 samples. The cylinder is introduced into each sample at a pre-rate of 1 mm/s and then at a measuring rate of 0.1 mm/s, the depth of penetration being 0.3 mm. The value recorded for the hardness is that of the maximum peak.
In addition, this pasty compound is, at a temperature of 23°C, in the form of a liquid fraction and of a solid fraction. In other words, the starting melting temperature of the pasty compound is less than 23°C. The liquid fraction of the pasty compound, measured at 23°C, represents 9 to 97% by weight of the compound. This liquid fraction at 23°C preferably represents between 15 and 85%, more preferably between 40 and 85%, by weight.

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

The enthalpy of fusion of the pasty compound is the enthalpy consumed by the compound to change from the solid state to the liquid state. The pasty compound is "in the solid state" when the whole of its mass is in the crystalline solid form. The pasty compound is "in the liquid state" when the whole of its mass is in the liquid form.

The enthalpy 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 TA Instrument, with a rise in temperature of 5 or 10°C per minute, according to the ISO Standard 11357-3: 1999. The enthalpy of fusion of the pasty compound is the amount of energy necessary to change the compound from the solid state to the liquid state. It is expressed in J/g.

The enthalpy of fusion consumed at 23°C is the amount of energy absorbed by the sample to change from the solid state to the state which it exhibits at 23°C, composed of a liquid fraction and of a solid fraction.

The liquid fraction of the pasty compound measured at 32°C preferably represents from 30 to 100% by weight of the compound, preferably from 80 to 100%, more preferably from 90 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.

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

The pasty compound is preferably chosen from synthetic compounds and compounds of plant origin. A pasty compound may be obtained by synthesis from starting materials of plant origin. Mention may be made especially, alone or as a mixture, of:

- lanolin, and derivatives thereof, such as lanolin alcohol, oxyethyleneated lanolins, acetylated lanolin, lanolin esters such as isopropyl lanolate, and oxypropyleneated lanolins,
- petroleum jelly, in particular the product whose INCI name is petrolatum and which is sold under the name Ultima White PET USP by the company Penreco,
- polyol ethers chosen from polyalkylene glycol pentaerythrityl ethers, fatty alcohol ethers of sugars, and mixtures thereof, polyethylene glycol pentaerythrityl ether comprising five oxyethylene (5 OE)
units (CTFA name: PEG-5 Pentaerythrityl Ether), polypropylene glycol pentaerythrityl ether comprising five oxypropylene (5 OP) units (CTFA name: PEG-5 Pentaerythrityl Ether) and mixtures thereof, and more especially the mixture PEG-5 Pentaerythrityl Ether, PPG-5 Pentaerythrityl Ether and soybean oil, sold under the name Lanolide by the company Vevy, which is a mixture in which the constituents are in a 46/46/8 weight ratio: 46% PEG-5 Pentaerythrityl Ether, 46% PPG-5 Pentaerythrityl Ether and 8% soybean oil;
- polymeric or non-polymeric silicone compounds;
- polymeric or non-polymeric fluoro compounds;
- vinyl polymers, especially:
  - olefin homopolymers and copolymers,
  - hydrogenated diene homopolymers and copolymers,
  - linear or branched oligomers, homopolymers or copolymers of alkyl (meth)acrylates preferably containing a C8-C30 alkyl group,
  - oligomers, homopolymers and copolymers of vinyl esters containing C8-C30 alkyl groups,
  - liposoluble polyethers resulting from the polyetherification between one or more C2-C100 and preferably C2-C50 diols,
  - esters (ie pasty fatty substance comprising at least one ester function);
  - and/or mixtures thereof.

Among the liposoluble polyethers that are particularly preferred are copolymers of ethylene oxide and/or of propylene oxide with C6-C30 long-chain alkylene oxides, more preferably such that the weight ratio of the ethylene oxide and/or of the propylene oxide to the alkylene oxides in the copolymer is from 5:95 to 70:30. In this family, mention will be made especially of copolymers such that the long-chain alkylene oxides are arranged in blocks having an average molecular weight from 1000 to 10 000, for example a polyoxyethylene/polydodecyl glycol block copolymer such as the ethers of dodecanediol (22 mol) and of polyethylene glycol (45 OE) sold under the brand name Elfacos ST9 by Akzo Nobel.

Preferably, the pasty fatty substance comprises at least one ester function. Among the ester pasty fatty substances, the following are especially preferred:
- esters of a glycerol oligomer, especially 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 and isostearic acid, and 12-hydroxystearic acid, preferably such as bis-diglyceryl polyacryladipate-2 sold under the brand name Softisan 649 by the company Sasol,
- vinyl ester homopolymers containing C8-C30 alkyl groups, such as polyvinyl laurate (sold especially under the reference Mexomer PP buy the company Chimex) and arachidyl propionate sold under the brand name Waxenol 801 by Alzo,
- phytosterol esters,
- fatty acid triglycerides and derivatives thereof, for instance triglycerides of fatty acids, which are especially C10-C18, and partially or totally hydrogenated such as those sold under the reference Softisan 100 by the company Sasol,
- pentaerythritol esters,
- ηη-crosslinked polyesters resulting from polycondensation between a linear or branched G₄-C₅₀ dicarboxylic acid or polycarboxylic acid and a C₂-C₃₀ diol or polyol,
- aliphatic esters of an ester resulting from the esterification of an aliphatic hydroxycarboxylic acid ester with an aliphatic carboxylic acid. Preferably, the aliphatic carboxylic acid comprises from 4 to 30 and preferably from 8 to 30 carbon atoms. It is 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, hexadecanoic acid, heptadecanoic acid, octadecanoic acid, isooleic acid, nonadecanoic acid, eicosanoic acid, isoarachidonic acid, octyldodecanoic acid, heneicosanoic acid and docosanoic acid, and mixtures thereof. The aliphatic carboxylic acid is preferably branched. The aliphatic hydroxycarboxylic acid ester is advantageously derived from a hydroxylated aliphatic carboxylic acid containing 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 aliphatic hydroxycarboxylic acid ester is chosen from:

a) partial or total esters of saturated linear mono-hydroxylated aliphatic monocarboxylic acids;
b) partial or total esters of unsaturated mono-hydroxylated aliphatic monocarboxylic acids;
c) partial or total esters of saturated monohydroxylated aliphatic polycarboxylic acids;
d) partial or total esters of saturated poly-hydroxylated aliphatic polycarboxylic acids;
e) partial or total esters of C₂ to C₁₅ aliphatic polyols that have reacted with a monohydroxylated or polyhydroxylated aliphatic monocarboxylic or polycarboxylic acid, and mixtures thereof,
- esters of a diol dimer and of a diacid dimer, where appropriate esterified on their free alcohol or acid function(s) with acid or alcohol radicals, especially dimer dilinoleate esters; such esters may be chosen especially from the esters having the following INCI nomenclature: bis-behenyl/isostearyl/phytosteryl dimer dilinoleyl dimer dilinoleate (Plandool G), phytosteryl/isostearyl/stearyl/behenyl dimer dilinoleate (Plandool H or Plandool S), and mixtures thereof,
- mango butter, such as the product sold under the reference Lipex 203 by the company Aarhuskarlshamn,
- hydrogenated oils of plant origin such as hydrogenated castor oil isostearate (sold as (SALACOS HCIS (V-L) vendu par NISSKHIN OIL)), hydrogenated soybean oil, hydrogenated coconut oil, hydrogenated rape seed oil, mixtures of hydrogenated plant oils such as the mixture of hydrogenated soybean, coconut, palm and rape seed plant oil, for example the mixture sold under the reference Akogel® by the company Aarhuskarlshamn (INCI name: Hydrogenated Vegetable Oil).
- shea butter, in particular the product whose INCI name is Butyrospermum parkii Butter, such as the product sold under the reference Sheasoft® by the company Aarhuskarlshamn,
- hydrogenated rosinate esters, such as dilinoleyl dimers of hydrogenated rosinate (Lusplan DD-DHR or DD-DHR from Nippon Fine Chemical);
- and mixtures thereof.

Preferably, the pasty fatty substance, is a hydrocarbon-based compound comprising at least one ester function.

Preferably, the pasty fatty substance, other than hydrogenated castor oil isostearate, is chosen from hydrogenated castor oil isostearate (SALACOS HCIS (V-L) vendu par NISSKHIN OIL), bis-behenyl/isostearyl/phytosteryl dimer dilinoleyl dimer dilinoleate, bis-diglycerol polyacyladipate-2,
hydrogenated castor oil dimer dilinoleate (Risocast-DA-L®, Risocast DA-H®, sold by Kokyu Alcohol Kogyo), polyvinyl laurate, mango butter, shea butter, hydrogenated soybean oil, hydrogenated coconut oil and hydrogenated rape seed oil, and mixtures thereof.

5 Fillers

A makeup and/or care composition according to the invention may also comprise one or more filler(s).

According to a first embodiment, the composition is free of fillers.

According to a second embodiment, the composition comprises at least one or more filler(s).

The term "fillers" should be understood as meaning colorless or white, mineral or synthetic particles of any shape, which are insoluble in the medium of the composition, irrespective of the temperature at which the composition is manufactured. These fillers serve especially to modify the rheology or the texture of the composition.

The fillers may be mineral or organic and of any shape, platelet-shaped, spherical or oblong, irrespective of the crystallographic form (for example lamellar, cubic, hexagonal, orthorhombic, etc.).

Mention may be made of talc, mica, silica, kaolin, clay, bentone, fumed silica particles, optionally hydrophilic- or hydrophobic-treated, polyamide (Nylon®) powder (Orgasol® from Atochem), poly-β-alanine powder and polyethylene powder, tetrafluoroethylene polymer (Teflon®) powder, lauroyllysine, starch, boron nitride, hollow polymer microspheres such as polyvinilidene chloride/acrylonitrile microspheres, for instance Expancel® (Nobel Industrie), acrylic acid copolymer microspheres (Polytrap® from the company Dow Corning) and silicone resin microbeads (for example Tospearls® from Toshiba), precipitated calcium carbonate, magnesium carbonate, magnesium hydrogen carbonate, hydroxyapatite, hollow silica microspheres (Silica Beads® from Maprecos), elastomeric polyorganosiloxane particles, glass or ceramic microcapsules, and metal soaps derived from organic carboxylic acids containing from 8 to 22 carbon atoms and preferably from 12 to 18 carbon atoms, for example zinc stearate, magnesium stearate, lithium stearate, zinc laurate or magnesium myristate, and mixtures thereof.

They may also be particles comprising a copolymer, said copolymer comprising trimethylol hexyl lactone. In particular, it may be a copolymer of hexamethylene 1,4-isocyanate/trimethylol hexyl lactone.

Such particles are especially commercially available, for example, under the name Plastic Powder D-400® or Plastic Powder D-800® from the company Toshiki.

According to a preferred embodiment, the composition according to the invention comprises at least silica, preferably hydrophobic treated silica

According to one preferred embodiment, the composition comprises at least one filler, and in particular chosen from fumed silicas that have optionally been hydrophilic- or hydrophobic-treated, preferably hydrophobic-treated. Preferably, the composition comprises at least one filler known as Silica Dimethyl Silylate (according to the CTFA).
The hydrophobic groups may especially be dimethylsilyloxyl or polydimethylsiloxane groups, which are especially obtained by treating fumed silica in the presence of polydimethylsiloxane or dimethyldichlorosilane. Silicas thus treated are known as Silica Dimethyl Silylate according to the CTFA (6th edition, 1995). They are sold, for example, under the references Aerosil R972® and Aerosil R974® by the company Degussa, and Cab-O-Sil TS-610® and Cab-O-Sil TS-720® by the company Cabot.

According to a particular embodiment, the composition according to the invention is free of "nanosilica", preferably free of hydrophobic treated silica of INCI name Silica Dimethyl Silylate. The term "nanosilica" means silica having a nanometric size, or a least a fraction of nanometric size.

Preferably, the composition contains between 0.01% and 25% by weight and in particular between 0.1% and 20% by weight of fillers relative to the total weight of the composition.

Preferably, when the composition is in liquid form, it comprises at least one filler, preferably chosen from silica, kaolin, bentone, fumed silica particles, which have preferably been hydrophobic-treated, lauroyllysine and starch.

Preferably, a composition according to the invention may comprise a filler chosen from:

- organomodified clays, which are preferably clays treated with compounds chosen especially from quaternary amines and tertiary amines. Organomodified clays that may be mentioned include organomodified bentonites, such as the product sold under the name Bentone 34 by the company Rheox, and organomodified hectorites such as the products sold under the names Bentone 27 and Bentone 38 by the company Rheox,

- hydrophobic fumed silica. Such silicas are sold, for example, under the references Aerosil R812® by the company Degussa and Cab-O-Sil TS-530® by the company Cabot, and under the references Aerosil R972® and Aerosil R974® by the company Degussa and Cab-O-Sil TS-610® and Cab-O-Sil TS-720® by the company Cabot.

The filler may be present in a content ranging from 0.1% to 5% by weight and better still from 0.4% to 3% by weight relative to the total weight of the composition.

Hydrophobic silica aerogel particles

According to a preferred embodiment the composition comprise may comprised at least hydrophobic silica aerogel particles. Such compound is a filler.

Preferably such compound is present when the composition is free of nanosilica and more particularly free of Silica Dimethyl Silylate.

Preferably the hydrophobic silica aerogel particles may be present in a content ranging from 0.1% to 15% by weight and better still from 0.1% to 10% by weight, relative to the total weight of the composition.
Preferably the hydrophobic silica aerogel particles may be present in a content ranging from 0.1% to 6% by weight and better still from 0.2% to 4% by weight, relative to the total weight of the composition.

According to this embodiment, the composition may comprise at least an additional filler, such as those described before for example.

Preferably, the composition according to the invention comprises at least Hydrophobic silica aerogel particles, when the composition is free of nanometric silica particules as described before, such as Silica Dimethyl Silylate.

Silica aerogels are porous materials obtained by replacing (by drying) the liquid component of a silica gel with air.

They are generally synthesized via a sol-gel process in liquid medium and then dried, usually by extraction of a supercritical fluid, the one most commonly used being supercritical CO$_2$. This type of drying makes it possible to avoid shrinkage of the pores and of the material. The sol-gel process and the various drying processes are described in detail in Brinker CJ., and Scherer G.W., Sol-Gel Science: New York: Academic Press, 1990.

The hydrophobic silica aerogel particles that may be used in the present invention have a specific surface area per unit of mass (SM) ranging from 500 to 1500 m$^2$/g, preferably from 600 to 1200 m$^2$/g and better still from 600 to 800 m$^2$/g, and a size expressed as the mean volume diameter ($D[0.5]$), ranging from 1 to 1500 µm, better still from 1 to 1000 µm, preferably from 1 to 100 µm, in particular from 1 to 30 µm, more preferably from 5 to 25 µm, better still from 5 to 20 µm and even better still from 5 to 15 µm.

According to one embodiment, the hydrophobic silica aerogel particles that may be used in the present invention have a size expressed as the mean volume diameter ($D[0.5]$) ranging from 1 to 30 µm, preferably from 5 to 25 µm, better still from 5 to 20 µm and even better still from 5 to 15 µm.

The specific surface area per unit of mass may be determined via the BET (Brunauer-Emmett-Teller) nitrogen absorption method described in the Journal of the American Chemical Society, vol. 60, page 309, February 1938 and corresponding to the international standard ISO 5794/1 (appendix D). The BET specific surface area corresponds to the total specific surface area of the particles under consideration.

The size of the hydrophobic silica aerogel particles may be measured by static light scattering using a commercial granulometer such as the MasterSizer 2000 machine from Malvern. The data are processed on the basis of the Mie scattering theory. This theory, which is exact for isotropic particles, makes it possible to determine, in the case of non-spherical particles, an "effective" particle diameter. This theory is especially described in the publication by Van de Hulst, H.C., "Light Scattering by Small Particles," Chapters 9 and 10, Wiley, New York, 1957.
According to one advantageous embodiment, the hydrophobic silica aerogel particles used in the present invention have a specific surface area per unit of mass (SM) ranging from 600 to 800 m²/g and a size expressed as the mean volume diameter (D[0.5]) ranging from 5 to 20 μm and better still from 5 to 15 μm.

The hydrophobic silica aerogel particles used in the present invention may advantageously have a tamped density \( p \) ranging from 0.04 g/cm³ to 0.10 g/cm³ and preferably from 0.05 g/cm³ to 0.08 g/cm³.

In the context of the present invention, this density, known as the tamped density, may be assessed according to the following protocol:

40 g of powder are poured into a measuring cylinder; the measuring cylinder is then placed on a Stav 2003 machine from Stampf Volumeter; the measuring cylinder is then subjected to a series of 2500 packing motions (this operation is repeated until the difference in volume between two consecutive tests is less than 2%); the final volume \( V_f \) of packed powder is then measured directly on the measuring cylinder. The tamped density is determined by the ratio \( m/V_f \), in this instance \( 40/V_f \) (Vf being expressed in cm³ and m in g).

According to one embodiment, the hydrophobic silica aerogel particles that may be used in the present invention have a specific surface area per unit of volume \( S_v \) ranging from 5 to 60 m²/cm³, preferably from 10 to 50 m²/cm³ and better still from 15 to 40 m²/cm³.

The specific surface area per unit of volume is given by the relationship:

\[ S_v = SM \cdot p \]

where \( p \) is the tamped density expressed in g/cm³ and SM is the specific surface area per unit of mass expressed in m²/g, as defined above.

Preferably, the hydrophobic silica aerogel particles according to the invention have an oil-absorbing capacity, measured at the wet point, ranging from 5 to 18 ml/g, preferably from 6 to 15 ml/g and better still from 8 to 12 ml/g.

The oil-absorbing capacity measured at the wet point, noted \( W_p \), corresponds to the amount of water that needs to be added to 100 g of particle in order to obtain a homogeneous paste.

It is measured according to the wet point method or the method for determining the oil uptake of a powder described in standard NF T 30-022. It corresponds to the amount of oil adsorbed onto the available surface of the powder and/or absorbed by the powder by measuring the wet point, described below:

An amount \( m = 2 \) g of powder is placed on a glass plate, and the oil (isononyl isononanoate) is then added dropwise. After addition of 4 to 5 drops of oil to the powder, mixing is performed using a spatula, and addition of oil is continued until a conglomerate of oil and powder has formed. At this point, the oil is added one drop at a time and the mixture is then triturated with the spatula. The addition of oil is stopped when a firm, smooth paste is obtained. This paste must be able to be spread on the glass plate without cracking or forming lumps. The volume \( V_s \) (expressed in ml) of oil used is then noted.
The oil uptake corresponds to the ratio \( V_s/m \).

The hydrophobic silica aerogel particles that may be used according to the present invention are preferably of silylated silica type (INCI name: silica silylate).

The term "hydrophobic silica" means any silica whose surface is treated with silylating agents, for example halogenated silanes such as alkylchlorosilanes, siloxanes, in particular dimethylsiloxanes such as hexamethyldisiloxane, or silazanes, so as to functionalize the OH groups with silyl groups Si-Rn, for example trimethylsilyl groups.

As regards the preparation of hydrophobic silica aerogel particles that have been surface-modified by silylation, reference may be made to document US 7 470 725.

Use will be made in particular of hydrophobic silica aerogel particles surface-modified with trimethylsilyl groups.

As hydrophobic silica aerogel particles that may be used in the invention, examples that may be mentioned include the aerogel sold under the name VM-2260 (INCI name: Silica silylate), by the company Dow Corning, the particles of which have a mean size of about 1000 microns and a specific surface area per unit of mass ranging from 600 to 800 \( \text{m}^2/\text{g} \).

Mention may also be made of the aerogels sold by the company Cabot under the references Aerogel TLD 201, Aerogel OGD 201, Aerogel TLD 203, and ENOVA AEROGEL MT 1100.

Use will be made more particularly of the aerogel sold under the name VM-2270 (INCI name: Silica silylate), by the company Dow Corning, the particles of which have a mean size ranging from 5-15 microns and a specific surface area per unit of mass ranging from 600 to 800 \( \text{m}^2/\text{g} \) (oil uptake equal to 1080 \( \mu\text{l}/100 \text{ g} \)).

Advantageously, the hollow particles in accordance with the invention are at least partly formed from hydrophobic silica aerogel particles, preferably those with a specific surface area per unit of mass \( (S_M) \) ranging from 500 to 1500 \( \text{m}^2/\text{g} \) and preferably from 600 to 1200 \( \text{m}^2/\text{g} \), and a size expressed as the mean volume diameter \( (D_{[0.5]}) \), ranging from 1 to 1500 \( \mu\text{m} \), better still from 1 to 1000 \( \mu\text{m} \), preferably from 1 to 100 \( \mu\text{m} \), in particular from 1 to 30 \( \mu\text{m} \), more preferably from 5 to 25 \( \mu\text{m} \), better still from 5 to 20 \( \mu\text{m} \) and even better still from 5 to 15 \( \mu\text{m} \).

The use of hydrophobic silica aerogel particles, also advantageously makes it possible to improve the stability of the composition.

**DEXTRIN ESTER**

Preferably the composition according to the invention may comprise at least an ester of dextrin, preferably an ester of dextrin and a fatty acid, preferably a \( \text{C}_{12} \) to \( \text{C}_{24} \) fatty acid.
Preferably, the dextrin ester is an ester of dextrine and a C_{14}C_{18} fatty acid.

Preferably, the dextrin ester is dextrine palmitate, for example such as those commercialised under the references Rheoparl TL® or Rheoparl KL® by the society CHEBA FLOUR.

Preferably a composition according to the invention may comprise a content of dextrin ester ranging from 0.1% to 15% by weight and preferably from 0.5% to 10% by weight, relative to the total weight of the composition.

Preferably a composition according to the invention may comprise a content of dextrin ester ranging from 1% to 8% by weight, relative to the total weight of the composition.

According to a particular embodiment, the composition according to the invention, the composition is free from dextrin ester.

**DYESTUFFS**

The compositions according to the invention may preferably comprise at least one dyestuff (also known as a colouring agent), which may be chosen from water-soluble or liposoluble dyes, pigments and nacres, and mixtures thereof.

The composition according to the invention may also comprise one or more dyestuffs chosen from water-soluble dyes and pulverulent dyestuffs, for instance pigments, nacres and glitter flakes that are well known to those skilled in the art.

The dyestuffs may be present in the composition in a content ranging from 0.01% to 30% by weight, relative to the weight of the composition, preferably from 0.1% to 20% by weight.

The term "pigments" should be understood as meaning white or coloured, mineral or organic particles that are insoluble in an aqueous solution, which are intended to colour and/or opacify the resulting film.

The pigments may be present in a proportion of from 0.01% to 30% by weight, especially from 0.1% to 25% by weight and in particular from 0.2% to 15% by weight relative to the total weight of the cosmetic composition.

As mineral pigments that may be used in the invention, mention may be made of titanium oxide, zirconium oxide or cerium oxide, and also zinc oxide, iron oxide or chromium oxide, ferric blue, manganese violet, ultramarine blue and chromium hydrate.

It may also be a pigment having a structure that may be, for example, of sericite/brown iron oxide/titanium dioxide/silica type. Such a pigment is sold, for example, under the reference Coverleaf NS or JS by the company Chemicals and Catalysts, and has a contrast ratio in the region of 30.
The dyestuff may also comprise a pigment with a structure that may be, for example, of silica microsphere type containing iron oxide. An example of a pigment having this structure is the product sold by the company Miyoshi under the reference PC Ball PC-LL-100 P, this pigment consisting of silica microspheres containing yellow iron oxide.


The term "nacres" should be understood as meaning coloured particles of any form, which may or may not be iridescent, especially produced by certain molluscs in their shell, or alternatively synthesized, and which have a colour effect via optical interference.

The nacres may be chosen from nacreous pigments such as titanium mica coated with an iron oxide, mica coated with bismuth oxychloride, titanium mica coated with chromium oxide, titanium mica coated with an organic dye and also nacreous pigments based on bismuth oxychloride. 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 dyestuffs.

Examples of nacres that may also be mentioned include natural mica coated with titanium oxide, with iron oxide, with natural pigment or with bismuth oxychloride.

Among the nacres available on the market, mention may be made of the nacres Timica, Flamenco and Duochrome (based on mica) sold by the company Engelhard, the Timiron nacres sold by the company Merck, the Prestige mica-based nacres, sold by the company Eckart, and the Sunshine synthetic mica-based nacres, sold by the company Sun Chemical.

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

As illustrations of nacres that may be used in the context of the present invention, mention may be made especially of the gold-coloured nacres sold especially 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 especially by the company Merck under the name Bronze fine (17384) (Colorona) and Bronze (17353) (Colorona) and by the company Engelhard under the name Super bronze (Cloisonne); the orange nacres sold especially 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 especially by the company Engelhard under the name Nu-antique copper 340XB (Cloisonne) and Brown CL4509 (Chromalite); the nacres with a copper tint sold especially by the company Engelhard under the name Copper 340A (Timica); the nacres with a red tint sold especially by the company Merck under the name Sienna fine (17386) (Colorona); the nacres with a yellow tint sold especially by the company Engelhard under the name Yellow (4502) (Chromalite); the red nacres with a gold tint sold especially by the company Engelhard under the name Sunstone.
GO12 (Gemtone); the pink nacres sold especially by the company Engelhard under the name Tan opale G005 (Gemtone); the black nacres with a gold tint sold especially by the company Engelhard under the name Nu antique bronze 240 AB (Timica), the blue nacres sold especially by the company Merck under the name Matte blue (17433) (Microna), the white nacres with a silvery tint sold especially by the company Merck under the name Xirona Silver, and the golden-green pink-orange nacres sold especially by the company Merck under the name Indian summer (Xirona), and mixtures thereof.

The term "dyes" should be understood as meaning compounds that are generally organic, which are soluble in fatty substances such as oils or in an aqueous-alcoholic phase.

The cosmetic composition according to the invention may also comprise water-soluble or liposoluble dyes. The liposoluble dyes are, for example, Sudan red, DC Red 17, DC Green 6, β-carotene, Sudan brown, DC Yellow 11, DC Violet 2, DC Orange 5 and quinoline yellow. The water-soluble dyes are, for example, beetroot juice or methylene blue.

The cosmetic composition according to the invention may also contain at least one material with a specific optical effect as dyestuff.

This effect is different from a simple conventional hue effect, i.e. a unified and stabilized effect as produced by standard dyestuffs, for instance monochromatic pigments. For the purposes of the invention, the term "stabilized" means lacking an effect of variability of the colour as a function of the angle of observation or alternatively in response to a temperature change.

For example, this material may be chosen from particles with a metallic tint, goniochromatic coloring agents, diffracting pigments, thermochromic agents, optical brighteners, and also fibres, especially interference fibres. Needless to say, these various materials may be combined so as to afford the simultaneous manifestation of two effects, or even of a novel effect in accordance with the invention.

**Aqueous phase**

A composition according to the invention may also comprise an aqueous phase, which may represent 1% to 80% by weight, especially 2% to 70% by weight or even 3% to 60% by weight relative to the total weight of the composition. This aqueous phase may be formed essentially from water, or may comprise a mixture of water and of water-miscible solvent (miscibility in water of greater than 50% by weight at 25°C) chosen especially from monoalcohols containing 1 to 5 carbon atoms such as ethanol, isopropanol, glycols containing 2 to 8 carbon atoms such as propylene glycol, ethylene glycol, 1,3-butylene glycol, dipropylene glycol, C₃-C₄ ketones and C₂-C₄ aldehydes, and mixtures thereof.

However, as stated above, advantageously, the compositions according to the invention are anhydrous.

The term "anhydrous" especially means that water is preferably not deliberately added to the compositions, but may be present in trace amounts in the various compounds used in the compositions.

**Additive(s)**
A makeup and/or care composition according to the invention may also comprise at least one agent usually used in cosmetics, chosen, for example, from reducing agents, thickeners, film-forming agents that are especially hydrophobic, silicone elastomers, softeners, antifoams, moisturizers, UV-screening agents, ceramides; cosmetic active agents; peptizers, fragrances, proteins, vitamins, propellants, hydrophilic or lipophilic, film-forming or non-film-forming polymers; lipophilic or hydrophilic gelling agents. The above additives are generally present in an amount for each of them of between 0.01% and 10% by weight relative to the total weight of the composition. Needless to say, a person skilled in the art will take care to select the constituents of the composition such that the advantageous properties associated with the invention are not, or are not substantially, adversely affected.

Usual additional cosmetic ingredients

A composition used according to the invention may also comprise any usual cosmetic ingredient, which may be chosen especially from antioxidants, film-forming polymers, fragrances, preserving agents, emollients, moisturizers, neutralizers, sunscreens, sweeteners, vitamins, free-radical scavengers and sequestrants, and mixtures thereof.

The amounts of each of these various ingredients are those conventionally used in the fields under consideration, and range, for example, from 0.01% to 10% by weight relative to the total weight of the composition.

Needless to say, a person skilled in the art will take care to select the optional additional ingredients and/or the amount thereof such that the advantageous properties of the composition according to the invention are not, or are not substantially, adversely affected by the envisaged addition.

A composition in accordance with the invention may be in liquid form or in solid form.

According to a first embodiment, the composition is in solid form. In particular, it may be a cosmetic product chosen from a lip balm and/or a lipstick. This product may preferably be in the form of a stick or cast in a dish.

According to one embodiment, it is a lipstick or a lip balm in stick form.

A composition according to the invention may constitute a liquid lipstick for the lips, a body makeup product, a facial or body care product or an antisun product.

According to one preferred embodiment, a composition of the invention is in liquid form. As illustrations of liquid formulations, mention may be made especially of lip glosses.

As stated previously, the composition according to the invention is homogeneous and stable and gives access to a deposit on the skin or the lips that has good cosmetic properties, in particular in terms of gloss, comfort (thickness deposit) and absence of transfer of the deposit. In particular, compositions according to the invention enable forming deposit exhibits no color transfer, in particular on a cup while drinking for a lip product, and when the composition contains one or more colouring agent(s).
EXAMPLES

In the description and in the examples that follow, unless otherwise mentioned, the percentages are weight percentages and the ranges of values given in the form "between... and..." include the stated lower and upper limits.

Unless otherwise mentioned, the values in the example below are expressed as % by weight relative to the total weight of the composition.

The examples below are presented as non-limiting illustrations of the field of the invention.

**Examples 1 to 4 of cosmetic formulae of liquid lipstick type (gloss)**

Four liquid makeup formulae according to the invention having the following composition were prepared (the percentages indicated are weight percentages). Formulae 1, 2 and 3 illustrate the invention. Formula 4 is a comparative composition containing no non volatile apolar hydrocarbonated oil and is therefore not belonging to the invention.

<table>
<thead>
<tr>
<th>INCI NAME AND COMMERCIAL REFERENCES</th>
<th>Formula 1 According to the invention (% in weight)</th>
<th>Formula 2 According to the invention (% in weight)</th>
<th>Formula 3 According to the invention (% in weight)</th>
<th>Comparative Formula 4 not belonging to the invention (% in weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED 7</td>
<td>0,48</td>
<td>0,06</td>
<td>0,07</td>
<td>0,19</td>
</tr>
<tr>
<td>IRON OXIDES</td>
<td>0,07</td>
<td>60,14</td>
<td>0,44</td>
<td>0,59</td>
</tr>
<tr>
<td>BLUE 1</td>
<td></td>
<td></td>
<td></td>
<td>0,06</td>
</tr>
<tr>
<td>Tite Dioxide</td>
<td></td>
<td></td>
<td></td>
<td>1,23</td>
</tr>
<tr>
<td>MICA</td>
<td></td>
<td></td>
<td></td>
<td>3,08</td>
</tr>
<tr>
<td>PENTAEYRTHRITYL TETRAISOSTEARATE</td>
<td>1,45</td>
<td>11,9</td>
<td>22,08</td>
<td>0,85</td>
</tr>
<tr>
<td>STEARYL HEPTANOATE</td>
<td>-</td>
<td>55</td>
<td>7,5</td>
<td>5</td>
</tr>
<tr>
<td>C12-15 ALKYL BENZOATE (TEGOSOFT TN from Evonik Goldschmidt)</td>
<td>-</td>
<td>--</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>ALLYL ACETATE/VINYL ACETATE COPOLYMER (MEXOMERE PQ from CHIMEX)</td>
<td>-</td>
<td>--</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>SILICA (MSS-500-3 H from KOBO)</td>
<td>2</td>
<td>55</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>SILICA (SUNSPHERE H-33 from AGC SI-TECH)</td>
<td>1,2</td>
<td>22</td>
<td>1,2</td>
<td></td>
</tr>
</tbody>
</table>
Preparation Process

1. A pre-gel was prepared with the hydrocarbonated resin and isododecane. The mixed is heated at 90°C over >400 imp with propeller blade until the hydrocarbonated resin was completely melted and the mixture had become clear. The mixture is then cooled down to room temperature, (isododecane was added if there is any weight loss).

2. In parallel, the fillers and pigments were ground in a three-roll mill in part of the oily phase and the rest of the oils were added. The mixture was heated at 90°C and homogenized with propeller blade until bulk becomes homogeneous.

3. The pre-gel was added to the mixture and mixed until it has become homogeneous.
The mixture has then been cooled down while slowly mixing, and was dropped in bulk at 40°C. The composition is then left at room temperature for 24 hours.

Aspect of the composition at room temperature (25°C): Formula 1 to 4 form homogenous and stable composition after 24 hours at room temperature, and after 7 days at 50°C. In particular, there is no phase separation, and no sedimentation.

**Evaluation of the compositions**

- **Shine**
The shine of the deposit obtained on the lips with the compositions was evaluated using a Polka SEI-M-0216-Polk-02 polarimetric camera and a Chromasphere SEI-M-02232-CHRO-0 as described in patent application FR 2 829 344. The gloss is evaluated immediately after application, and after one hour after application of the formula on the lips.

- **Color Transfert resistance**
Each of the composition obtained has been evaluated in terms of transfer on a cup resistance 5 minutes after applications according to the protocol described below.

- **Pay-off**
- **Tackiness**

**Protocol for testing the tack**

The tacky nature is evaluated by applying the finger to a deposit produced on the lips 5 minutes after the application of the composition, by rubbing the upper and the lower lips together and the tack was assessed by the person on removal of her upper and lower lips.

For the measurements performed, it is considered that:

- + No tack during drying
- ++ Slight tack effect during drying
- +++ Moderate tack effect during drying
- ++++ Strong tack effect during drying
- +++++ Very strong tack effect during drying

The following results were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Global Shine T0 (immediately after application)</th>
<th>Global Shine 1 hour</th>
<th>Pay-off</th>
<th>Non-transfer</th>
<th>Comfort sensation on lips</th>
<th>Application properties</th>
<th>Tack</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formula 1</strong></td>
<td>Very good</td>
<td>Very Good</td>
<td>Very good</td>
<td>Very good</td>
<td>Good (smooth and glide)</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td><strong>Formula 2</strong></td>
<td>good</td>
<td>good</td>
<td>good</td>
<td>good</td>
<td>Good (smooth and glide)</td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>
It emerges from these results that the formula 1, 2 and 3 in accordance with the invention are easy to apply (good glide) and form homogenous and comfortable deposits on the lips that exhibit good or very good color transfer resistance.

On contrary, the comparative formula 4 is difficult to apply (does not spread smoothly) and the deposit obtained with formula 4 has not a good color transfer resistance and gives a sensation of dryness to the lips.

Beside, the deposits obtained with formulas 1, 2, 3 and 4 are glossy and sparingly or not tacky.

With formula 1, 2 and 3, the deposit has a good wear of shine after 1 hour, but with comparative formula 4, the deposit does not have a good wear of shine after 1 hour.

The deposit obtained with formula 1 has even a good wear of shine after 2 hours.
CLAIMS

1. Composition for making up and/or caring for the skin and/or the lips, comprising, in a
   physiologically acceptable medium:
   - at least one silsesquioxane resin,
   - at least one hydrocarbon-based resin with a number-average molecular weight of less than or
     equal to 10000g/mol,
   - at least one non volatile silicone oil, preferably phenylated, and
   - at least one non volatile apolar hydrocarbonated oil,

   wherein the weight ratio of the silsesquioxane resin to the hydrocarbon-based resin is 1 or
   more, preferably 2 or more, preferably 4 or more preferably 7 or more.

2. Composition according to Claim 1, in which the silsesquioxane resin is a
   polypropylsilsesquioxane resin.

3. Composition according to any one of the preceding claims, comprising no hydrocarbon-based
   block copolymer comprising at least one styrene block and at least one block comprising units
   chosen from butadiene, ethylene, propylene, butylene and isoprene or a mixture thereof.

4. Composition according to any of the preceding Claims, in which the silsesquioxane resin is a
   polypropylsilsesquioxane resin.

5. Composition according to any one of the preceding claims, in which the silsesquioxane resin is
   present in an amount ranging from about 0.1% to about 60% by weight, preferably from about
   1% to about 50% by weight, more preferably from 5 to 40% by weight, and even more
   preferably from 10 to 30% by weight, relative to the total weight of the composition.

6. Composition according to any one of the preceding claims, in which the said resin is an indene
   hydrocarbon-based resin, which is preferably hydrogenated, preferably derived from the
   polymerization of an indene monomer and of a monomer chosen from styrene, methylindene
   and methylstyrrene, and mixtures thereof.

7. Composition according to any one of the preceding claims, in which the hydrocarbon-based
   resin is an indene resin chosen from hydrogenated indene/methylstyrrene/styrene copolymers.

8. Composition according to any one of the preceding claims, in which the hydrocarbon-based
   resin is present in an amount ranging from 0.1 to 45% by weight, preferably from 0.5 to 30% by
   weight and better still from 1 to 20% by weight, more preferably from 1 to 10%, relative to the
   total weight of the composition.

9. Composition according to any one of the preceding claims, in which said non volatile apolar
   hydrocarbonated oil is chosen from polybutene, hydrogenated polybutene, polyisobutene,
   hydrogenated polyisobutene, polydecene, hydrogenated polydecene, and mixture thereof.
10. Composition according to any one of the preceding claims, in which said non volatile apolar hydrocarbonated oil is present in a content comprised between 10% and 80% by weight, preferably between 14% to 70% by weight and preferably between 15% to 60% by weight, relative to the total weight of the composition.

11. Composition according to any one of the preceding claims, in which said non volatile silicon oil is a phenylated silicone oil.

12. Composition according to any one of the preceding claims, in which said non volatile phenylated silicon oil is chosen from:
   a) the phenyl silicone oils corresponding to the following formula (I):

   ![Formula I]

   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, at least groups R represent a phenyl groups;

   b) the phenyl silicone oils corresponding to the following formula (II):

   ![Formula II]

   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, at least groups R represent a phenyl groups;

   c) the phenyl silicone oils corresponding to the following formula (III):

   ![Formula III]

   in which Me represents methyl, Ph represents phenyl, preferably such as 1,3,5-trimethyl-1,1,3,5,5-pentaphenyl trisiloxane (IUPAC name: trimethyl pentaphenyl trisiloxane) and Tetramethyl Tetraphenyl Trisiloxane,

   d) the phenyl silicone oils corresponding to the following formula (IV):

   ![Formula IV]
in which \( \text{Me} \) represents methyl, \( y \) is between 1 and 1,000 and \( X \) represents \(-\text{CH}_2-\text{CH}(\text{CH}_3)(\text{Ph})\),
e) the phenyl silicone oils corresponding to formula (V) below:

\[
\text{Me} - \begin{array}{c}
\text{Si} \\
\text{Me}
\end{array} - \begin{array}{c}
\text{O} \\
\text{Si}
\end{array} - \begin{array}{c}
y \\
z
\end{array} - \begin{array}{c}
\text{OR'} \\
\text{Ph}
\end{array} - \text{Si}(\text{CH}_3)_3
\]

(V)

in which \( \text{Me} \) is methyl and \( \text{Ph} \) is phenyl, \( \text{OR'} \) represents a group \(-\text{OSiMe}_3\) and \( y \) is 0 or ranges between 1 and 1000, and \( z \) ranges between 1 and 1000, in particular, \( y \) and \( z \) are such that compound (V) is a non-volatile oil, preferably such as trimethylsiloxycyclophenyl dimethicone when \( y \) ranges between 1 and 1000, and preferably such as phenyl trimethylsiloxy trisiloxane when \( y \) is equal to 0,
f) the phenyl silicone oils corresponding to formula (VI) below, and mixtures thereof:

\[
\begin{array}{c}
\text{R}_1 \\
\text{R}_2 \\
\text{R}_3
\end{array} - \begin{array}{c}
\text{Si} \\
\text{O}
\end{array} - \begin{array}{c}
\text{Si} \\
\text{O}
\end{array} - \begin{array}{c}
p \\
q
\end{array} - \begin{array}{c}
\text{Si} \\
\text{O}
\end{array} - \begin{array}{c}
r \\
m
\end{array} - \text{Si}(\text{R}_{10})_3
\]

(VI)

in which:
- \( \text{R}_1 \) to \( \text{R}_{10} \), independently of each other, are saturated or unsaturated, linear, cyclic or branched \( \text{C}_1-\text{C}_3 \) hydrocarbon-based radicals,
- \( m, n, p \) 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,
preferably, the sum \( m+n+p+q \) is between 1 and 900, preferably, \( q \) is equal to 0, preferably, \( \text{R}_j \) to \( \text{R}_{10} \), independently of each other, represent a saturated or unsaturated linear or branched \( \text{C}_1-\text{C}_{30} \) hydrocarbon radical, preferably saturated, and especially \( \text{C}_1-\text{C}_{12} \) hydrocarbon-based radical, in particular \( \text{C}_3-\text{C}_{16} \) and more particularly \( \text{C}_4-\text{C}_{10} \), or a monocyclic or polycyclic \( \text{C}_6-\text{C}_{14} \)
and especially \( \text{Q}_0-\text{C}_{13} \) aryl radical, or an aralkyl radical. Preferably, \( \text{R}_1 \) to \( \text{R}_{10} \) may each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or alternatively a phenyl, tolyl, benzyl or phenethyl radical. \( \text{R}_1 \) to \( \text{R}_{10} \) may especially be identical, and in addition may be a methyl radical;
g) the phenyl silicone oils corresponding to formula (VH) below, and mixtures thereof:
in which:
- Ri to Re, independently of each other, are saturated or unsaturated, linear, cyclic or branched C1-C30 hydrocarbon-based radicals, preferably R1 to R6 are a C1-C30 alkyl radical, an aryl radical or an aralkyl radical,
- 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, Ri to R6, independently of each other, represent a saturated or unsaturated linear or branched C1-C30, hydrocarbon radical, preferably saturated, and especially C1-C12 hydrocarbon-based radical, in particular C3-C18 and more particularly C4-C10 or a monocyclic or polycyclic C6-C14 and especially C10-C13 aryl radical, or an aralkyl radical. Preferably, R1 to R6 may each represent a methyl, ethyl, propyl, butyl, isopropyl, decyl, dodecyl or octadecyl radical, or alternatively a phenyl, tolyl, benzyl or phenethyl radical, preferably Ri to R6 may especially 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 apply, in formula (VII);

h) the phenyl silicone oils corresponding to the following formula, and mixtures thereof:

in which:
R1, R2, R5 and R6 are, together or separately, an alkyl radical containing 1 to 6 carbon atoms, R3 and R4 are, together or separately, an alkyl radical containing from 1 to 6 carbon atoms or an aryl radical with the proviso that at least one from R3 and R4 is a phenyl radical, X is an alkyl radical containing from 1 to 6 carbon atoms, a hydroxyl radical or a vinyl radical, n and p being integer superior 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;

i) and mixture thereof.

13. Composition according to any one of the preceding claims, in which said non volatile phenylated silicon oil is chosen from:

- phenyl trimethicones,
- Tetramethyl Tetraphenyl Trisiloxane,
- diphenylsiloxysiloxantrimethicone,
- trimethylpentaphenyl trisiloxane,
- phenyltrimethicones,
- phenyltrimethylsiloxydiphenylsiloxanes,
- diphenyl dimethicones,
- diphenylmethylphenyltrimethicones and
- 2-phenylethyl trimethylsiloxysilicates,
- and mixtures thereof.

14. Composition according to the preceding claim 11, in which said non volatile phenylated silicon oil is chosen from phenyl dimethicone oils corresponding to formula (VH), wherein \( R_1 \) m, n, p and \( R_4 \) to \( \frac{3}{4} \) are as defined before, and preferably \( R_1 \) to \( \frac{3}{4} \) are methyl radicals, and wherein \( m=0 \) and \( n \) and \( p \) are independently of each other, integers between 1 and 100, preferably the silicone oil is chosen from diphenyl dimethicone.

15. Composition according to the preceding claim 11, in which said non volatile phenylated silicon oil is chosen from phenyl dimethicone oils corresponding to formula (VII), wherein \( m, n, p \) and \( R_4 \) to \( \frac{3}{4} \) are as defined before, and preferably \( R_1 \) to \( \frac{3}{4} \) are methyl radicals, and wherein \( p \) is between 1 and 100, the sum \( n+m \) is between 1 and 100, and \( n=0 \), preferably the silicone oil is chosen from trimethylsiloxyphenyltrimethicone.

16. Composition according to the preceding claim 11, in which said non volatile phenylated silicon oil is chosen from phenyl dimethicone oils corresponding to formula (VH), preferably chosen from:
- diphenyl dimethicone;
- trimethyl siloxysiloxanyl dimethicone,
- and mixtures thereof.

17. Composition according to any one of the preceding claims, comprising from 1% to 70% by weight, preferably from 5% to 60% by weight or even from 10% to 50% by total weight of non volatile silicone oil(s) oil(s) relative to the total weight of the said composition.

18. Composition according to any one of the preceding claims, in which the weight ratio of the total non volatile silicone oil(s) to the non volatile apolar hydrocarbonated oil(s) is comprised between 0.1 and 10, more preferably comprised between 0.1 and 5, preferably between 0.1 and 1.8, and more preferably comprised between 0.2 and 1.59.

19. Composition according to any one of the preceding claims, in which the said composition comprises at least a filler such as silica and/or hydrophobic silica.

20. Composition according to any one of the preceding claims, in which the said composition also comprises hydrophobic silica aerogel particles, preferably hydrophobic silica aerogels particles surface-modified with trimethylsilyl groups, preferably in a content ranging from 0.1% to 15%.
by weight, better from 0.1% to 10% by weight, better 0.1% to 6% by weight and better still from 0.2% to 4% by weight, relative to the total weight of the composition.

21. Composition according to any one of the preceding claims, in which the said composition also comprises at least one additional compound, preferably chosen from a polar hydrocarbonated non volatile oil, and/or a fatty pasty compound, and/or a filler, and/or a colouring agent, and/or mixture thereof.

22. Composition according to any one of the preceding claims, in which the said composition also comprises an ester of dextrin and a fatty acid, preferably a C\textsubscript{12} to C\textsubscript{24} fatty acid, preferably dextrin palmitate.

23. Composition according to any one of the preceding claims, in which the said composition is a lip product such as a lipstick, a lipcare product, a lipstick pencil, or a lip gloss.

24. Composition according to any one of the preceding claims, in which the said composition is liquid.

25. Process for making up and/or caring for the skin and/or the lips, comprising, applying at least a composition according to any one of the preceding claims on the skin and/or the lips.

26. Process for making up the lips comprising applying said composition on the lips.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K8/58 A61K8/81 A61K8/891 A61Q1/04 A61Q19/00

ADD.

According to International Patent Classification (IPC) or into both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61Q A61K

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, CHEM ABS Data, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>EP 1 944 015 A2 (OREAL [FR]) 16 July 2008 (2008-07-16) page 1, paragraph 1-3 page 4, paragraph 21 - page 6, paragraph 44 examples 1,9 -----</td>
<td>1-26</td>
</tr>
<tr>
<td>Y</td>
<td>FR 2 965 176 AI (OREAL [FR]) 30 March 2012 (2012-03-30) page 2, line 10 - page 3, line 12 page 4, line 1 - page 5, line 28 page 32, line 1 - line 15 Formula 6 and 7; examples -----</td>
<td>1-26</td>
</tr>
</tbody>
</table>

X Further documents are listed in the continuation of Box C. X 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) one of 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

"A" document member of the same patent family

Date of the actual completion of the international search: 11 March 2013

Date of mailing of the international search report: 21/03/2013

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:
Ruckebusch, Virginia

Form PCT/ISA210 (second sheet) (April 2005)
<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>DE 20 2010 001688 Ul (SCHWAN STABIL COSMETICS GMBH [DE]) 9 June 2011 (2011-06-09) page 2, paragraph 6 - page 3, paragraph 9 examples 3, 4</td>
<td>1-26</td>
</tr>
<tr>
<td>A</td>
<td>DE 10 2008 036717 Al (HENKEL AG &amp; CO KGAA [DE]) 11 February 2010 (2010-02-11) page 19, paragraph 115-116 - page 20</td>
<td>1-26</td>
</tr>
<tr>
<td>Patent document cited in search report</td>
<td>Publication date</td>
<td>Patent family member(s)</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP 2008189663 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 2008171006 Al</td>
</tr>
<tr>
<td>FR 2965176</td>
<td>30-03-2012</td>
<td>NONE</td>
</tr>
<tr>
<td>DE 202010001688</td>
<td>09-06-2011</td>
<td>DE 202010001688 Ul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP 2531171 A2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 2012288462 AI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WO 2011095331 A2</td>
</tr>
<tr>
<td>DE 102008036717</td>
<td>11-02-2010</td>
<td>DE 102008036717 Al</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP 2379051 A2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WO 2010015471 A2</td>
</tr>
</tbody>
</table>