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(71) Applicant *(for all designated States except US)*: **L'OREAL SA** [FR/FR]; 14, Rue Royale, F-75008 Paris (FR).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KANJI, Mohamed** [US/US]; 5106 Hana Road, Edison, NJ 08817 (US). **ORR, Carl** [US/US]; 1086 Raritan Orad, Scotch Plains, NJ 07076 (US). **PINZON, Carlos, O.** [CO/US]; 355 Shea Drive, New Milford, NJ 07646 (US).

(74) Agents: **GARRETT, ARTHUR, S.** et al.; Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (US).

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(54) Title: COSMETIC COMPOSITIONS CONTAINING AT LEAST ONE HETERO POLYMER AND AT LEAST ONE FILM-FORMING SILICONE RESIN AND METHODS OF USING

(57) Abstract: Compositions, in one embodiment a transfer resistant cosmetic composition, which may also be pliable and comfortable to wear upon application to a substrate. The compositions comprise at least one structuring polymer and at least one film-forming silicone resin. The at least one structuring polymer may be a polyamide polymer. The invention, in one embodiment, relates to cosmetic, dermatological, and pharmaceutical products containing this composition.

COSMETIC COMPOSITIONS CONTAINING AT LEAST ONE HETERO POLYMER AND AT LEAST ONE FILM-FORMING SILICONE RESIN AND METHODS OF USING

The present invention relates to compositions and methods for caring for, treating, and making up at least one keratinous material, for example at least one human keratinous material, such as skin, including the scalp, lips, superficial body growths, including the nails, and/or at least one keratinous fiber, which includes the hair, eyelashes, and eyebrows. In one embodiment of the invention, the compositions are transfer resistant cosmetic compositions. In another embodiment of the invention, the compositions are pliable and/or comfortable to wear upon application. The compositions, in one embodiment, comprise at least one structuring polymer and at least one film-forming silicone resin. The invention, in one embodiment, relates to cosmetic, dermatological, and pharmaceutical products containing this composition. Due to the good stability of the compositions of the invention, it is possible to add at least one UV blocker to the composition. As used herein, the expression "at least one" means one or more and thus, includes individual components as well as mixtures/combinations.

Many cosmetic compositions, including pigmented cosmetics such as foundations, concealers, lipsticks, mascaras, and other cosmetic and sunscreen compositions, have been developed for longer wear and non-transfer properties. This is accomplished by the use of compositions that form a film after application. Such compositions generally contain volatile solvents which evaporate on contact with the skin or other keratinous materials, leaving behind a layer comprising waxes and/or resins, pigments, fillers, and actives. However, these compositions tend to be uncomfortable for the wearer as the compositions remain on the skin or other keratinous materials as a brittle or non-flexible film. Such compositions may not be either pliable or soft, and they may not be comfortable to wear. There may also be a tendency for such compositions to flake off because of poor

adherence to the skin or other keratinous materials. Furthermore, compositions may have a tendency to be tacky, resulting in poor application and spreadability characteristics.

The need therefore still remains for improved long-wearing cosmetic compositions which transfer little or not at all, *i.e.*, "transfer-free" or transfer resistant compositions, which also possess good cosmetic properties such as pliability and comfort. For example, a composition which is transfer resistant may deposit a film onto keratinous materials which may not transfer when the keratinous materials comes into contact with, for example, other keratinous materials, such as skin, or with a cup, paper, a cigarette, or a handkerchief.

The transfer resistance of a composition may be evaluated by an art recognized transfer resistance test. In one such test, a composition is applied to the clean, bare skin of a group of subjects as a smooth, thin layer, such as a 1" x 1" square in size. The composition is allowed to air dry for 5 minutes, and using a facial tissue or other cloth or sponge and medium pressure, the area is wiped as if attempting to wipe the product off of the skin. The subjects are then asked to evaluate the results. Positive results are described as the presence of a makeup film that could not be easily removed without soap and water. For example, the results may be rated on a scale of 1 to 5 with 5 being the best and 1 being the worst.

To achieve at least one of the foregoing advantages, the present invention, in one embodiment, provides compositions comprising at least one structuring polymer, *e.g.*, a polyamide polymer, comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom. The compositions also comprise at least one liquid fatty phase comprising at least one film-forming silicone resin. The present invention also relates to methods for making such compositions.

It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only, and are not restrictive of the invention.

The invention, in one embodiment, provides compositions comprising combinations of at least one structuring polymer, *e.g.*, a polyamide polymer, and at least one film-forming silicone resin. In one embodiment, the at least one structuring polymer, *e.g.*, a polyamide polymer, and the at least one film-forming silicone resin are present in an amount effective to provide transfer resistant properties, and may also provide at least one of the following properties: pliability, softness, and wearing comfort.

One subject of the invention is cosmetic and/or dermatological compositions which are useful for the care, make-up and/or treating of at least one keratinous material, which compositions may be of suitable hardness to allow their preparation in the form of a stick or other structured form, which may be stable.

As defined herein, stability can be tested by placing the composition in a controlled environment chamber for 8 weeks at 25°C. In this test, the physical condition of the sample is inspected as it is placed in the chamber. The sample is then inspected again at 24 hours, 3 days, 1 week, 2 weeks, 4 weeks and 8 weeks. At each inspection, the sample is examined for abnormalities in the composition such as bending or leaning if the composition is in stick form, phase separation, melting, or syneresis. As used herein, syneresis is the appearance of droplets on the surface of a composition that are visible to the naked eye. The stability is further tested by repeating the 8 week test at 4°C, 37°C, 45°C, 50°C, and under freeze-thaw conditions. A composition is considered to lack stability if in any of these tests an abnormality that impedes functioning of the composition is observed. The skilled artisan will readily recognize an abnormality that impedes functioning of a composition based on the intended application.

Structured liquid fatty phases in cosmetic or dermatological products are known in the art. Structured liquid fatty phases may be found, for example, in solid compositions such as deodorants, balms, lip compositions, concealer products, and cast foundations.

The compositions of the invention, in one embodiment, may comprise at least one liquid fatty phase. As used herein, "liquid fatty phase" means a fatty phase which is liquid at room temperature (25°C) and at atmospheric pressure (760 mmHg, *i.e.*, 101 kPa) and which is composed of at least one fatty substance, such as an oil, which is liquid at room temperature and not soluble in water. If the at least one liquid fatty phase comprises two or more fatty substances, they should be mutually compatible, *i.e.*, forming a homogenous phase macroscopically.

Structured liquid fatty phases may make it possible to control the exudation of the liquid fatty phase from the solid compositions of which they are components, including exudation in a wet or hot atmosphere or environment. Structuring of the liquid fatty phase may also limit bleeding of this phase outside of the intended area of application and especially into wrinkles and fine lines after it has been deposited, for example, on keratinous materials. As used herein, "keratinous material" is meant to comprise hair, lips, skin, scalp and superficial body growths such as eyelashes, eyebrows, and nails.

The invention applies not only to make-up products for at least one keratinous material such as lip compositions, lip pencils, foundations, including foundations which may be cast in the form of a stick or a dish, concealer products, temporary tattoo products, eyeliners, and mascara bars, but also to body hygiene products such as deodorant sticks, and to care products and products for treating at least one keratinous material such as sunscreen and after-sun products which may be in stick form. The present invention may be in the form of a mascara product including mascara bars, an eyeliner product, a foundation product, a lipstick product, a blush for cheeks or eyelids, a deodorant product, a make-up product for the body, a make-up-removing product, an eyeshadow product, a face powder product, a concealer product, a treating shampoo product, a hair conditioning product, a sunscreen (antisun) product, a colorant for the skin or hair, or a skin care

formula such as, for example, anti-pimple or shaving cut formulas. As defined herein, a deodorant product is a body hygiene product and does not relate to care, make-up, or treatment of keratinous materials, including keratinous fibers, skin, or lips.

For example, the composition of the present invention may be in a form chosen from a paste, a solid, a gel, and a cream. It may also be an emulsion, such as an oil-in-water or water-in-oil emulsion, a multiple emulsion, such as an oil-in-water-in-oil emulsion or a water-in-oil-in-water emulsion, or a solid, rigid or supple gel, including anhydrous gels. In one embodiment, the composition of the invention is anhydrous. The composition of the invention may, for example, comprise an external or continuous liquid fatty phase. By "external or continuous" phase, it is meant, by way of example, the water phase in a water-in-oil emulsion, wherein the oil droplets are dispersed throughout the external or continuous water phase.

In another embodiment, the composition of the invention is transparent or clear, including for example, a composition without pigments. The composition can also be in a form chosen from a translucent anhydrous gel and a transparent anhydrous gel. The composition can also be a molded composition or cast as a stick or a dish. The composition in one embodiment is a solid such as a molded stick or a poured stick.

Structuring polymer

In one embodiment, the at least one structuring polymer in the composition of the invention is a solid that is not deformable at room temperature (25°C) and atmospheric pressure (760 mmHg, *i.e.*, 101 kPa). In a further embodiment, the at least one structuring polymer is capable of structuring the composition without opacifying it. This may be due to the fact that the polymer does not crystallize. Moreover, the structuring of the liquid fatty phase comprising the at least one structuring polymer may be due to the hydrogen interactions between two molecules of the polymer and/or between the molecules of the polymer and the liquid fatty phase. As defined above,

the at least one structuring polymer of the present invention comprises a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom. In one embodiment, the at least one structuring polymer further comprises at least one terminal fatty chain chosen from alkyl and alkenyl chains, such as of at least 4 carbon atoms, and further such as comprising from 8 to 120 carbon atoms, bonded to the polymer skeleton via at least one linking group. The terminal fatty chain may, for example, be functionalized. The at least one structuring polymer may also further comprise at least one pendant fatty chain chosen from alkyl and alkenyl chains, such as of at least 4 carbon atoms, and further such as comprising from 8 to 120 carbon atoms, bonded to any carbon or heteroatom of the polymer skeleton via at least one linking group. The pendant fatty chain may, for example, be functionalized. The at least one structuring polymer may comprise at least one pendant fatty chain as defined above, at least one terminal fatty chain as defined above, or both, and one or both types of chains can be functionalized.

In one embodiment, the at least one structuring polymer comprises at least two hydrocarbon-based repeating units. As a further example, the at least one structuring polymer comprises at least three hydrocarbon-based repeating units and as an even further example, the at least three repeating units are identical.

As used herein, "functionalized" means comprising at least one functional (reactive) group. Non-limiting examples of functional groups include hydroxyl groups, ether groups, oxyalkylene groups, polyoxyalkylene groups, carboxylic acid groups, amine groups, amide groups, halogen containing groups, including fluoro and perfluoro groups, halogen atoms, ester groups, siloxane groups, and polysiloxane groups.

For purposes of the invention, the expression "functionalized chain" means, for example, an alkyl chain comprising at least one functional group chosen, for example, from those recited above. For example, in one

embodiment, the hydrogen atoms of at least one alkyl chain may be substituted at least partially with fluorine atoms.

According to the invention, these chains may be linked directly to the polymer skeleton or via an ester function or a perfluoro group.

For the purposes of the invention, the term "polymer" means a compound containing at least 2 repeating units, such as, for example, a compound containing at least 3 repeating units, which may be identical.

As used herein to describe the structuring polymers, the expression "hydrocarbon-based repeating unit" includes a repeating unit comprising from 2 to 80 carbon atoms, such as, for example, from 2 to 60 carbon atoms. The at least one hydrocarbon-based repeating unit may also comprise oxygen atoms. The hydrocarbon-based repeating unit may be chosen from saturated and unsaturated hydrocarbon-based repeating units which in turn may be chosen from linear hydrocarbon-based repeating units, branched hydrocarbon-based repeating units, and cyclic hydrocarbon-based repeating units. The at least one hydrocarbon-based repeating unit may comprise, for example, at least one heteroatom that is part of the polymer skeleton, *i.e.*, not pendant. The at least one heteroatom may be chosen, for example, from nitrogen, sulphur, and phosphorus. For example, the at least one heteroatom may be a nitrogen atom, such as a non-pendant nitrogen atom. In another embodiment, the at least one hydrocarbon-based repeating unit may comprise at least one heteroatom, with the proviso that the at least one heteroatom is not nitrogen. In another embodiment, the at least one heteroatom is combined with at least one atom chosen from oxygen and carbon to form a heteroatom group. In one embodiment, the heteroatom group comprises a carbonyl group.

The at least one repeating unit comprising at least one heteroatom may be chosen, for example, from amide groups, carbamate groups, and urea groups. In one embodiment, the at least one repeating unit comprises amide groups forming a polyamide skeleton. In another embodiment, the at

least one repeating unit comprises carbamate groups and/or urea groups forming a polyurethane skeleton, a polyurea skeleton, and/or a polyurethane-polyurea skeleton. The pendant chains, for example, can be linked directly to at least one of the heteroatoms of the polymer skeleton. In yet another embodiment, the at least one hydrocarbon-based repeating unit may comprise at least one heteroatom group, with the proviso that the at least one heteroatom group is not an amide group. In one embodiment, the polymer skeleton comprises at least one repeating unit chosen from silicone units and oxyalkylene units, and wherein the at least one repeating unit may be located between the hydrocarbon-based repeating units.

In one embodiment, the compositions of the invention comprise at least one structuring polymer with nitrogen atoms, such as amide, urea, or carbamate units, such as amide units, and at least one polar oil.

In one embodiment, in the at least one structuring polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of repeating units and fatty chains, and as a further example, from 50% to 95%. In a further embodiment wherein the polymer skeleton is a polyamide skeleton, in the at least one structuring polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of all amide units and fatty chains, and as a further example, from 50% to 95%.

In a further embodiment, the nature and proportion of the at least one hydrocarbon-based repeating unit comprising at least one heteroatom depends on the nature of a liquid fatty phase of the composition and is, for example, similar to the nature of the liquid fatty phase. For example, and not to be limited as to theory, the at least one structuring polymer, *e.g.*, a polyamide polymer, may have an affinity with the liquid fatty phase, and, for example, with a chemical portion of one of the oils forming the liquid fatty phase of the composition, so that physical links with the oils, such as hydrogen bonds, are formed. The more polar the hydrocarbon-based

repeating units containing a heteroatom, and in high proportion, which corresponds to the presence of several heteroatoms, the greater the affinity the at least one structuring polymer may have for polar oils. Conversely, the more non-polar, or even apolar, and lesser in proportion the hydrocarbon-based repeating units containing a heteroatom, the greater the affinity the at least one structuring polymer may have for apolar oils.

In another embodiment, the invention is drawn to a structured composition containing at least one liquid fatty phase structured with at least one structuring polymer, wherein the at least one structuring polymer is a polyamide polymer comprising a polymer skeleton comprising at least one amide repeating unit and optionally at least one pendant fatty chain and/or at least one terminal chain that are optionally functionalized and comprise from 8 to 120 carbon atoms, bonded to at least one of the amide repeating units via at least one linking group. The liquid fatty phase further may contain at least one organogellator for gelling the liquid fatty phase. The at least one liquid fatty phase, the at least one structuring polymer, *e.g.*, a polyamide polymer, and optionally the at least one organogellator, together form a physiologically acceptable medium.

When the at least one structuring polymer has amide repeating units, the pendant fatty chains may be linked to at least one of the nitrogen atoms in the amide repeating units.

In one embodiment, the at least one structuring polymer, *e.g.*, a polyamide polymer, may have a weight-average molecular mass up to and including 1,000,000, such as, for example, up to and including 500,000, and as a further example, up to and including 100,000, and as a further example, up to and including 50,000. For example,the weight-average molecular mass may range from 1000 to 30,000, such as from 2000 to 20,000, further such as from 2000 to 10,000.

The at least one structuring polymer, *e.g.*, a polyamide polymer, is not soluble in water or in an aqueous phase. In one embodiment of the invention,

the at least one structuring polymer, *e.g.*, a polyamide polymer, has no ionic groups or functions, *i.e.*, is nonionic. In another embodiment, the at least one structuring polymer, *e.g.*, a polyamide polymer, can have one ionizable function.

As discussed, the at least one structuring polymer may, for example, be chosen from polyamide polymers. A polyamide polymer may comprise, for example, a polymer skeleton which comprises at least one amide repeating unit, *i.e.*, a polyamide skeleton. In one embodiment, the polyamide skeleton may further comprise at least one terminal fatty chain chosen from alkyl chains, for example, alkyl chains comprising at least four carbon atoms, and alkenyl chains, for example, alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group, and/or at least one pendant fatty chain chosen from alkyl chains, for example, alkyl chains comprising at least four carbon atoms, and alkenyl chains, for example, alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group. In one embodiment, the polyamide skeleton may comprise at least one terminal fatty chain chosen from fatty chains comprising from 8 to 120 carbon atoms, such as, for example, from 12 to 68 carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group and/or at least one pendant fatty chain chosen from fatty chains comprising from 8 to 120 carbon atoms, such as, for example, from 12 to 68 carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group, such as bonded to any carbon or nitrogen of the polyamide skeleton via the at least one linking group. In one embodiment, the at least one linking group is chosen from single bonds and urea, urethane, thiourea, thiourethane, thioether, thioester, ester, ether and amine groups. For example, the at least one linking group is chosen from ureas, esters, and amines, and as a further example, is chosen from esters and amines. The bond is, for example, an

ester bond. In one embodiment, these polymers comprise a fatty chain at each end of the polymer skeleton, such as the polyamide skeleton.

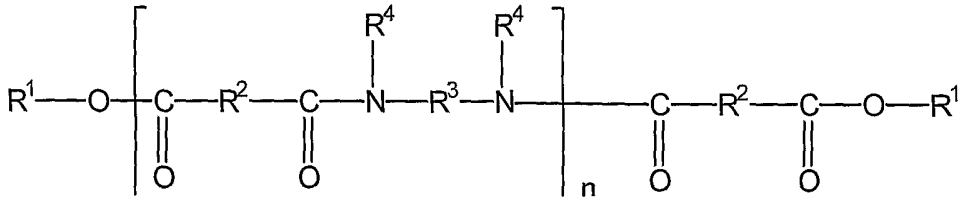
In one embodiment, due to the presence of at least one chain, the at least one structuring polymer, *e.g.*, a polyamide polymer, may be readily soluble in oils (*i.e.*, water-immiscible liquid compounds) and thus may give macroscopically homogeneous compositions even with a high content (at least 25%) of the polyamide polymers, unlike certain polymers of the prior art that do not contain such alkyl or alkenyl chains at the end of the polyamide skeleton. As defined herein, a composition is soluble if it has a solubility of greater than 0.01 g per 100 ml of solution at 25°C.

In a further embodiment, the polyamide polymers can be chosen from polymers resulting from at least one polycondensation reaction between at least one acid chosen from at least one dicarboxylic acid comprising at least 32 carbon atoms, such as from 32 to 44 carbon atoms, and at least one amine chosen from diamines comprising at least 2 carbon atoms, such as from 2 to 36 carbon atoms, and triamines comprising at least 2 carbon atoms, such as from 2 to 36 carbon atoms. The at least one dicarboxylic acid can, for example, be chosen from dimers of at least one fatty acid comprising at least 16 carbon atoms, such as oleic acid, linoleic acid, and linolenic acid. The at least one amine can, for example, be chosen from diamines, such as ethylenediamine, hexylenediamine, hexamethylenediamine, phenylenediamine, and triamines. In one embodiment, the at least one amine can be ethylenetriamine.

The polyamide polymers may also be chosen from polymers comprising at least one terminal carboxylic acid group. The at least one terminal carboxylic acid group can, for example, be esterified with at least one alcohol chosen from monoalcohols comprising at least 4 carbon atoms. For example, the at least one alcohol can be chosen from monoalcohols comprising from 10 to 36 carbon atoms. In a further embodiment, the

monoalcohols can comprise from 12 to 24 carbon atoms, such as from 16 to 24 carbon atoms, and, for example, 18 carbon atoms.

In one embodiment, the at least one polyamide polymer may be chosen from those described in U.S. Patent No. 5,783,657, which are polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one polyamide polymer;
- R^1, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms. In one embodiment, the alkyl group comprises from 4 to 24 carbon atoms and the alkenyl group comprises from 4 to 24 carbon atoms;
- R^2, which are identical or different, are each chosen from C_4 to C_{42} hydrocarbon-based groups, with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon-based groups;
- R^3 , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms, and nitrogen atoms, with the proviso that R^3 comprises at least 2 carbon atoms; and
- R^4, which are identical or different, are each chosen from hydrogen atoms, C_1 to C_{10} alkyl groups and a direct bond to at least one group chosen from R^3 and another R^4 such that when said at least one group is chosen from another R^4, the nitrogen atom to which both R^3 and R^4 are bonded forms part

of a heterocyclic structure defined in part by R^4-N-R^3, with the proviso that at least 50% of all R^4 are chosen from hydrogen atoms.

In one embodiment, the at least one terminal fatty chain of formula (I) is linked to the last heteroatom, in this case nitrogen, of the polyamide skeleton. In a further embodiment, the terminal chains are functionalized. In another embodiment, the ester groups of formula (I) which form part of the terminal and/or pendant fatty chains for purposes of the invention, are present in amounts ranging from 15% to 40% of the total number of ester and amide groups (*i.e.*, heteroatom groups), such as, for example, from 20% to 35%.

In formula (I), in one embodiment, n may be an integer ranging from 1 to 10, for example an integer ranging from 1 to 5, and as a further example, an integer ranging from 3 to 5. In one embodiment of the present invention, R^1, which are identical or different, can, for example, each be chosen from C_{12} to C_{22} alkyl groups, such as from C_{16} to C_{22} alkyl groups.

In one embodiment of the present invention, R^2, which are identical or different, can, for example, each be chosen from C_{10} to C_{42} alkyl groups. At least 50% of all R^2, for example, at least 75% of all R^2, which are identical or different, can, for example, each be chosen from groups comprising from 30 to 42 carbon atoms. In these embodiments, the remaining R^2, which are identical or different, can, for example, each be chosen from C_4 to C_{18} groups, such as from C_4 to C_{12} groups.

In one embodiment of the invention, R^3, which can be identical or different, can, for example, each be chosen from C_2 to C_{36} hydrocarbon-based groups and polyoxyalkylene groups. In another embodiment, R^3, which can be identical or different, can each, for example, be chosen from C_2 to C_{12} hydrocarbon-based groups.

In one embodiment, R^4, which can be identical or different, can each be chosen from hydrogen atoms.

As used herein, hydrocarbon-based groups may be chosen from linear, cyclic, and branched, saturated and unsaturated groups. The

hydrocarbon-based groups can be chosen from aliphatic and aromatic groups. In one example, the hydrocarbon-based groups are chosen from aliphatic groups. The alkyl and alkylene groups may be chosen from linear, cyclic, and branched, saturated and unsaturated groups.

In general, the pendant and terminal fatty chains of the at least one structuring polymer may be chosen from linear, cyclic, and branched, saturated and unsaturated groups. The pendant and terminal fatty chains can be chosen from aliphatic and aromatic groups. In one example, the pendant and terminal fatty chains are chosen from aliphatic groups.

According to the invention, the structuring of the liquid fatty phase is obtained with the aid of at least one structuring polymer, such as the at least one polyamide polymer of formula (I). The at least one polyamide polymer of formula (I) may, for example, be in the form of a mixture of polymers, and this mixture may also comprise a compound of formula (I) wherein n is equal to zero, *i.e.*, a diester.

Non-limiting examples of at least one polyamide polymer which may be used in the composition according to the present invention include the commercial products made or sold by Arizona Chemical under the names Uniclear 80 and Uniclear 100. These are sold, respectively, in the form of an 80% (in terms of active material) gel in a mineral oil and a 100% (in terms of active material) gel. These polymers have a softening point ranging from 88°C to 94°C, and may be mixtures of copolymers derived from monomers of (i) C_{36} diacids and (ii) ethylenediamine, and have a weight-average molecular mass of about 6000. Terminal ester groups result from esterification of the remaining acid end groups with at least one alcohol chosen from cetyl alcohol and stearyl alcohol. A mixture of cetyl and stearyl alcohols is sometimes called cetylstearyl alcohol.

Other non-limiting examples of at least one polyamide polymer which may be used in the composition according to the present invention include polyamide polymers or polyamide resins resulting from the condensation of at

least one aliphatic dicarboxylic acid and at least one diamine, the carbonyl and amine groups being condensed via an amide bond. Examples of these polyamide polymers are those made or sold under the brand name Versamid by the companies General Mills Inc. and Henkel Corp. (Versamid 930, 744 or 1655) or by the company Olin Mathieson Chemical Corp. under the brand name Onamid, for example, Onamid S or C. These resins have a weight-average molecular mass ranging from 6000 to 9000. For further information regarding these polyamides, reference may be made to U.S. Patent Nos. 3,645,705 and 3,148,125.

Other examples of polyamides useful in the compositions of the invention include those made or sold by the company Arizona Chemical under the references Uni-Rez (2658, 2931, 2970, 2621, 2613, 2624, 2665, 1554, 2623, and 2662) and the product made or sold under the reference Macromelt 6212 by the company Henkel. For further information regarding these polyamides, reference may be made to U.S. Patent No. 5,500,209. Such polyamides display high melt viscosity characteristics. MACROMELT 6212, for example, has a high melt viscosity at 190°C of 30-40 poise (as measured by a Brookfield Viscometer, Model RVF #3 spindle, 20 RPM).

In a further embodiment, the at least one polyamide polymer may be chosen from polyamide resins from vegetable sources. Polyamide resins from vegetable sources may be chosen from, for example, the polyamide resins of U.S. Patent Nos. 5,783,657 and 5,998,570.

The structuring polymers of the invention may be non-waxy polymers.

In one embodiment, the at least one structuring polymer, *e.g.*, a polyamide polymer, may be present in the composition in an amount ranging, for example, from 0.5% to 80%, such as from 2% to 60%, and further such as from 5% to 40%, by weight, relative to the total weight of the composition. In a further embodiment, the at least one structuring polymer, *e.g.*, a polyamide polymer may be present in the composition in an amount ranging, for

example, from 5% to 25% by weight, relative to the total weight of the composition.

In one embodiment, the at least one structuring polymer in the composition according to the invention corresponds to the polyamide polymers of formula (I). Due to fatty chain(s), these polymers may be readily soluble in oils and thus lead to compositions that are macroscopically homogeneous even with a high content (at least 25%) of at least one structuring polymer.

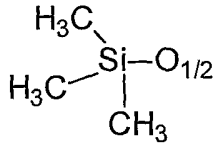
The at least one structuring polymer, *e.g.,* a polyamide polymer, in the compositions of the invention may have a softening point greater than 50°C, such as from 65°C to 190°C, further such as from 65°C to less than 150°C, and further such as from 70°C to less than 130°C, and even further such as from 80°C to 105°C. This softening point may be lower than that of structuring polymers used in the art which may facilitate the use of the at least one structuring polymer of the present invention and may limit the degradation of the liquid fatty phase. The softening point can be measured by the well-known art-recognized method of Differential Scanning Calorimetry ("DSC"), with a temperature rise ranging from 5 °C to 10 °C per minute.

Film-Forming Silicone Resin

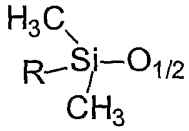
The at least one film-forming silicone resin useful in the compositions of the invention may be chosen from any silicone resin that has film forming properties. In one embodiment, the at least one film-forming silicone resin is chosen from silsesquioxanes and siloxysilicates.

The use of silicone polymers or derivatives as film-forming agents in cosmetic compositions is known in the art. *See, e.g.,* U.S. Patent Nos. 5,965,112, 5,800,816, 5,911,974, and 5,959,009. Silicone resin nomenclature is known in the art as "MDTQ" nomenclature, whereby a silicone resin is described according to the various monomeric siloxane repeating units which make up the polymer. Each letter of "MDTQ" denotes a different type of unit. The symbol M denotes the monofunctional unit

$(CH_3)_3SiO_{1/2}$. This unit is considered monofunctional because the silicone atom only shares one oxygen for the formation of the chain. The "M" unit can be represented as:

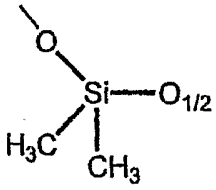


At least one of the methyl groups can be replaced, such as, for example, to give a unit with formula $[R(CH_3)_2]SiO_{1/2}$, as represented in the following structure:

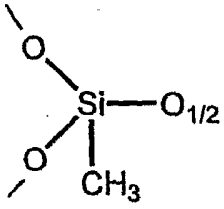


where R is other than a methyl group.

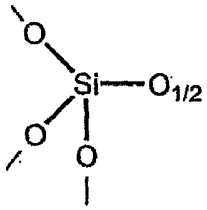
The symbol "D" denotes the difunctional unit $(CH_3)_2SiO_{2/2}$, where two of the available bonds from the silicone atom are used for binding to oxygen for the formation of the polymeric chain. The "D" unit, which is the major building block of dimethicone oils, can be represented as:



The symbol "T" denotes the trifunctional unit, $(CH_3)SiO_{3/2}$, where three of the available bonds from the silicone atom are used for binding to oxygen for the formation of the polymeric chain. The "T" unit can be represented as:



As in the "M" unit, any methyl group could be replaced in "D" or "T" with a group R which is other than methyl. Finally, the symbol "Q" denotes a quadrifunctional unit $SiO_{4/2}$, where all four of the available bonds from the silicone atom are used for binding to oxygen for the formation of the polymeric chain. The "Q" unit can be represented as:



The number of different silicones which can be manufactured is staggering. It would be clear to one skilled in the art that the properties of each of the silicones will vary depending on the type of monomer, the type of substitution, the size of the polymeric chain, and the degree of cross linking or size of the side chain. Different properties are attained depending on whether the backbone is a silicone chain with carbon-based side chains or whether the backbone is carbon-based with silicone side chains.

As described above, the at least one film-forming silicone resin may, in one embodiment, be chosen from siloxysilicates and silsesquioxanes. Any siloxysilicates or silsesquioxanes that functions as a film-former is within the practice of the invention. In one embodiment, the at least one film-forming silicone resin is chosen from substituted siloxysilicates and silsesquioxanes. A substituted siloxysilicate or a substituted silsesquioxane may be, for example, a siloxysilicate or a silsesquioxane where a methyl group has been substituted with a longer carbon chain such as an ethane, propane, or butane chain. The carbon chain may be saturated or unsaturated.

In one embodiment, the at least one film-forming silicone resin is chosen from siloxysilicates such as trimethylsiloxysilicates, which are represented by the following formula: $[(CH_3)_3\text{-}Si\text{-}O]_x\text{-}(SiO_{4/2})_y$ (MQ units), where x and y can have values ranging from 50 to 80. In a further

embodiment, a siloxysilicate may be chosen from any combination of M and Q units, such as, for example, $[(R)_3\text{-Si-O}]_x\text{-}(SiO_{4/2})_y$, where R is chosen from methyl groups and longer carbon chains.

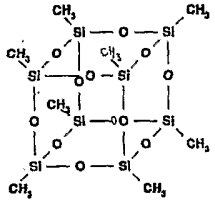
In a further embodiment, the film-forming silicone resin is chosen from silsesquioxanes that are represented by the following formula: $(CH_3SiO_{3/2})_x$ (T units), where x has a value of up to several thousand and the CH_3 may be replaced by an R, as described above for T units. In one embodiment, the silsesquioxane is chosen from polymethylsilsesquioxanes, which are silsesquioxanes that do not have a substituent replacing the methyl group. The polymethylsilsesquioxanes useful in the present invention are film-formers and can, for example, have about 500 or less T units, such as, for example, from about 50 to about 500 T units.

In one embodiment of the invention, the film forming silicone resins have a melting point ranging from about 40°C to about 80°C. These silicone resins are soluble or dispersible in volatile silicones or other organic liquids. In one embodiment, the at least one film-forming silicone resins may be solid at about 25°C. In one embodiement, the at least one film-forming silicone resins may have a molecular weight ranging from 1000 to 10,000 grams/mole. In one embodiment, the at least one film-forming silicone resin is present in the composition in an amount ranging from 0.5% to 20% by weight, relative to the total weight of the composition, such as, for example, ranging from1% to 10%.

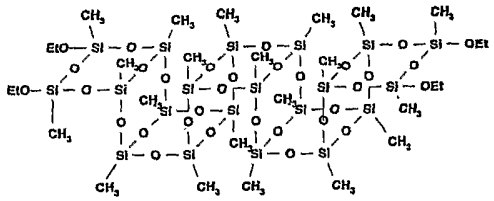
Not all polymethylsilsesquioxanes are film-formers. For example, the highly polymerized polymethylsilsesquioxanes (T Resins), such as Tospearl™ from Toshiba or KMP590 from Shin-Etsu are highly insoluble, and therefore are not effective film-formers. The molecular weight of these polymethylsilsesquioxanes is difficult to determine, and they generally contain a thousand or more T units.

An example of a polymethylsilsesquioxane useful in accordance with the present invention is Belsil PMS MK, also referred to as Resin MK,

available from Wacker Chemie. This polymethylsilsesquioxane is a polymer primarily formed of polymerized repeating units of $CH_3SiO_{3/2}$ (T units), and which can also contain up to about 1% (by weight or by mole) of $(CH_3)_2SiO_{2/2}$ (D units). It is believed that the polymers are in a "cage" and "ladder" configuration, as exemplified in the figure below. The weight-average molecular weight of the "cage" unit has been calculated to be 536. The majority of the polymer is in the "ladder" configuration, where the ends are capped with ethoxy (CH_3CH_2O) groups. The weight percent of ethoxy present is about 4.5%, and the mole percent is about 7% (silicone units). Since this functionality can react with water, a small and variable amount of SiOH can also be present. The weight-average molecular weight can be, for example, from about 500 to about 50,000, such as about 10,000.



Cage



Ladder

Polymethylsilsesquioxanes suitable for use in the present invention also include KR-220L available from SHIN-ETSU. The structure of KR-220L is made up of mostly silicone T-units ($CH_3SiO_{3/2}$), with Si-OH or silanol end units. There are no D units. Other polymethylsilsesquioxanes that can be useful in the practice of the invention include KR-242A, which has a structure of about 98% methyl T units and about 2% dimethyl D units, with Si-OH or silanol end units, and KR-251, which has a structure of about 88% methyl T units and about 12% dimethyl D units, with Si-OH or silanol end units, both of which are available from SHIN-ETSU.

In one embodiment of the invention, the at least one film-forming silicone resin is chosen from combinations of M, D, T, and Q units comprising at least two units chosen from M, D, T, and Q, which satisfy the relationship

$R_nSiO_{(4-n)/2}$ wherein n is a value ranging from 1.0 to 1.50. Some resins of this type are disclosed in U.S. Patent No. 6,074,654. R may be a methyl group or any carbon chain as long as the silicone resin retains its film-forming properties. Up to 5% of silanol or alkoxy functionality may also be present in the resin structure as a result of processing.

In a further embodiment, the at least one film-forming silicone resin comprises repeating M units and Q units. The ratio of M units to Q units may be, for example, about 0.7:1. The at least one film-forming silicone resin may be chosen, for example, from Wacker 803 and 804, available from Wacker Silicones Corporation and G.E. 1170-002 from General Electric.

In a further embodiment, the at least one film-forming silicone resin is a copolymer, wherein at least one unit of the copolymer is chosen from M, D, T, and Q silicone units, and wherein at least one additional unit of the copolymer is chosen from an ester. The at least one film-forming silicone resin may be chosen from, for example, diisostearoyl trimethylolpropane siloxysilicates, such as SF 1318, available from GE Silicones.

The compositions according to the present invention can additionally comprise at least one additional film-former. The at least one additional film-former may improve, for example, smoothness or spreadability, water-resistance, transfer resistance properties, or other cosmetic or pharmaceutical properties desired by one of skill in the art. The at least one additional film former may be chosen from, for example, polyethylene, vinylpyrrolidone/vinyl acetate (PVP/VA) copolymers such as the Luviskol® VA grades (all ranges) from BASF® Corporation and the PVP/VA series from ISP, acrylic fluorinated emulsion film formers including Foraperle® film formers such as Foraperle® 303 D from Elf Atochem (although Foraperle® may not be appropriate for some cosmetic formulations) GANEX® copolymers such as butylated PVP, PVP/Hexadecene copolymer, PVP/Eicosene copolymer or tricontanyl, Poly(vinylpyrrolidone/diethylaminoethyl methacrylate) or PVP/Dimethylaminoethylmethacrylate copolymers such as Copolymer 845,

Resin ACO-5014 (Imidized IB/MA copolymer), other PVP based polymers and copolymers, alkyl cycloalkylacrylate copolymers (*See, e.g.,* WO 98/42298), Mexomere® film formers and other allyl stearate/vinyl acetate copolymers (allyl stearate/VA copolymers), polyolprepolymers such as PPG-12/SMDI copolymer, polyolprepolymers such as PPG-1 2/SM DI copolymer, Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-polymer with 1,1'-methylene-bis-(4-isocyanatocyclohexane) available from Barnet, Avalure™ AC Polymers (Acrylates Copolymer) and Avalure™ UR polymers (Polyurethane Dispersions), available from BFGoodrich.

The at least one additional film former which also may be used within the framework of the invention includes film formers having any film former chemistry known in the art such as, for example, PVP, acrylates, urethane, synthetic polymers of the polycondensate type, free-radical type, or ionic type, polymers of natural origin, and mixtures thereof, as well as any other film former known within the practice of the cosmetic and pharmaceutical arts which one skilled in the art may determine to be compatible.

An appropriate amount of the at least one additional film-former may be determined by one of skill in the art, and can vary considerably based on the application. For example, in one embodiment, the at least one additional film-former may be used in an amount ranging from 0.1% to 20%, such as, for example, ranging from 1% to 10%, by weight, relative to the total weight of the composition.

The amounts of the at least one film-forming silicone resin and of the at least one structuring polymer, *e.g.*, a polyamide polymer, may be chosen according to the desired hardness and desired stability of the compositions, and according to the specific application envisaged. The respective amounts of the at least one structuring polymer, *e.g.*, a polyamide polymer, and of the at least one film-forming silicone resin can be such that a disintegrable solid which does not flow under its own weight is obtained.

Depending on the intended application, such as, for example, a stick, hardness of the composition may be considered. The hardness of a composition may, for example, be expressed in gram force (gf). The compositions of the present invention may, for example, have a hardness ranging from 20 gf to 2000 gf, for example, ranging from 20 gf to 900 gf, and further, such as, for example ranging from 20 gf to 600 gf.

This hardness can be measured in one of two ways. A first test for hardness is according to a method of penetrating a probe into the composition and in particular using a texture analyzer (for example TA-XT2i from Rhéo) equipped with an ebonite cylinder of height 25 mm and diameter 8 mm. The hardness measurement is carried out at 20°C at the center of 5 samples of the composition. The cylinder is introduced into each sample of composition at a pre-speed of 2 mm/s, and then at a speed of 0.5 mm/s, and finally at a post-speed of 2 mm/s, the total displacement being 1 mm. The recorded hardness value is that of the maximum peak observed. The measurement error is ± 50gf.

A second test for hardness is the "cheese wire" method, which involves cutting an 8.1 mm or 12.7 mm stick of composition and measuring its hardness at 20°C using a DFGHS 2 tensile testing machine from Indelco-Chatillon Co. at a speed of 100 mm/minute. The hardness value from this method is expressed in gram force as the shear force required to cut a stick under the above conditions. According to this method, the hardness of compositions according to the present invention which may be in stick form may, for example, range from 30 gf to 300 gf, such as from 30 gf to 250 gf, and further, such as from 30 gf to 200 gf.

The hardness of the composition of the present invention may be such that the compositions are self-supporting and can easily disintegrate to form a satisfactory deposit on keratinous materials. In addition, this hardness may impart good impact strength to the inventive compositions which may be molded or cast, for example, in stick or dish form.

The skilled artisan may choose to evaluate a composition using at least one of the tests for hardness outlined above based on the application envisaged and the hardness desired. If one obtains an acceptable hardness value, in view of the intended application, from at least one of these hardness tests, the composition falls within the scope of the invention.

According to the present invention, the compositions in stick form may also possess the properties of deformable, flexible elastic solids and may also have noteworthy elastic softness upon application to keratinous materials. The compositions in stick form of the prior art do not have this elasticity and flexibility.

Liquid fatty phase

The at least one liquid fatty phase, in one embodiment, may comprise at least one oil. In one embodiment, the at least one oil may have an affinity with the at least one structuring polymer, *e.g.*, a polyamide polymer,. The at least one oil may, for example, be chosen from polar oils and apolar oils, including hydrocarbon-based liquid oils and oily liquids at room temperature. In one embodiment, the compositions of the invention comprise at least one structuring polymer, *e.g.*, a polyamide polymer, and at least one polar oil. The polar oils of the invention may, for example, be added to the apolar oils, the apolar oils may act as co-solvent for the polar oils.

According to the invention, the structuring of the at least one liquid fatty phase may, for example, be obtained with the aid of at least one structuring polymer, such as the polyamide polymer of formula (I). In general, the polymers of formula (I) may be in the form of mixtures of polymers, these mixtures also possibly containing a synthetic product corresponding to a compound of formula (I) in which n is 0, *i.e.,* a diester.

In one embodiment, the liquid fatty phase of the composition may contain more than 30%, for example, more than 40%, of liquid oil(s) having a chemical nature similar to that of the skeleton of the at least one structuring polymer, and, for example, from 50% to 99.4%. In one embodiment, the

liquid fatty phase structured with a polyamide-type skeleton contains a high quantity, *i.e.,* greater than 30%, for example greater than 40%, relative to the total weight of the liquid fatty phase, or, for example, from 50% to 99.4%, of at least one apolar, such as hydrocarbon-based, oil. For the purposes of the invention, the expression "hydrocarbon-based oil" means an oil comprising carbon and hydrogen atoms, optionally with at least one group chosen from hydroxyl, ester, carboxyl, and ether groups.

For a liquid fatty phase structured with at least one polymer containing a partially silicone-based skeleton, this fatty phase may contain more than 30%, for example, more than 40%, relative to the total weight of the liquid fatty phase and, for example, from 50% to 99.4%, of at least one silicone-based liquid oil, relative to the total weight of the liquid fatty phase.

For a liquid fatty phase structured with at least one polymer of the hydrocarbon-based type, this fatty phase may contain more than 30%, for example more than 40% by weight, or, for example, from 50% to 99.4% by weight, of at least one liquid apolar, such as hydrocarbon-based, oil, relative to the total weight of the liquid fatty phase.

For example, the at least one polar oil useful in the invention may be chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids may have varied chain lengths from C_4 to C_{24}, these chains possibly being chosen from linear and branched, and saturated and unsaturated chains; these oils are chosen from, for example, wheat germ oil, corn oil, sunflower oil, karite butter, castor oil, sweet almond oil, macadamia oil, apricot oil, soybean oil, cotton oil, alfalfa oil, poppy oil, pumpkin oil, sesame oil, marrow oil, rapeseed oil, avocado oil, hazelnut oil, grape seed oil, blackcurrant seed oil, evening primrose oil, millet oil, barley oil, quinoa oil, olive oil, rye oil, safflower oil, candlenut oil, passion flower oil and musk rose oil; or alternatively caprylic/capric acid triglycerides such as those made or sold by Stearineries

Dubois, or those made or sold under the names Miglyol 810, 812 and 818 by Dynamit Nobel;

- synthetic oils or esters of formula R_5COOR_6 in which R_5 is chosen from cyclic, linear, and branched fatty acid residues containing from 1 to 40 carbon atoms, and R_6 is chosen from, for example, a hydrocarbon-based chain containing from 1 to 40 carbon atoms, for example, 1-4 carbon atoms, on condition that $R_5 + R_6 \geq 10$, such as, for example, purcellin oil (cetostearyl octanoate), isononyl isononanoate, C_{12}-C_{15} alkyl benzoates, isopropyl myristate, 2-ethylhexyl palmitate, isostearyl isostearate and alkyl or polyalkyl octanoates, decanoates or ricinoleates; hydroxylated esters such as isostearyl lactate and diisostearyl malate; and pentaerythritol esters;
- synthetic ethers containing from 10 to 40 carbon atoms;
- C_8 to C_{26} fatty alcohols such as oleyl alcohol; and
- C_8 to C_{26} fatty acids such as oleic acid, linolenic acid or linoleic acid.

The at least one apolar oil according to the invention may be chosen from, for example, silicone oils chosen from volatile and non-volatile, linear, branched, and cyclic polydimethylsiloxanes (PDMSs) that are liquid at room temperature; polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms; phenylsilicones such as phenyl trimethicones, phenyl dimethicones, phenyl trimethylsiloxy diphenylsiloxanes, diphenyl dimethicones, diphenyl methyldiphenyl trisiloxanes and 2-phenylethyl trimethylsiloxysilicates; hydrocarbons chosen from cyclic, linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin, such as volatile liquid paraffins (such as isoparaffins and isododecane) or non-volatile liquid paraffins and derivatives thereof, liquid petrolatum, liquid lanolin, polydecenes, hydrogenated polyisobutene such as hydrogenated polybutene, for example, Parleam®, from Nippon Oils and Fats, and squalane; and mixtures thereof. The structured oils, for example those structured with polyamides such as those of formula (I), or the polyurethanes, polyureas, or

polyurea-urethanes, may be, in one embodiment, apolar oils, such as an oil or a mixture of hydrocarbon oils chosen from those of mineral and synthetic origin, chosen from hydrocarbons such as alkanes such as Parleam® oil, isoparaffins including isododecane, and squalane, and mixtures thereof. These oils may, in one embodiment, be combined with at least one phenylsilicone oil.

The liquid fatty phase, in one embodiment, contains at least one non-volatile oil chosen from, for example, hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters or ethers, silicone oils and mixtures thereof.

In another embodiment, the total liquid fatty phase may be present, for example, in an amount ranging from 1% to 99.4% by weight, relative to the total weight of the composition, for example, ranging from 5% to 99.4%, such as ranging from 5% to 95.5%, ranging from 10% to 80%, and further ranging from 20% to 75%.

For the purposes of the invention, the expression "volatile solvent or oil" means any non-aqueous medium capable of evaporating on contact with the skin or the lips in less than one hour at room temperature and atmospheric pressure. The volatile solvent(s) of the invention is(are) organic solvents, such as volatile cosmetic oils that are liquid at room temperature, having a non-zero vapor pressure at room temperature and atmospheric pressure, ranging, for example, from 10^{-2} to 300 mmHg (1.33 Pa to 10,000 Pa) and, as a further example, greater than 0.3 mmHg (4Pa). The expression "non-volatile oil" means an oil which remains on the skin or the lips at room temperature and atmospheric pressure for at least several hours, such as those having a vapor pressure of less than 10^{-2} mmHg (1.33Pa).

According to the invention, these volatile solvents or oils may facilitate the staying power or long wearing properties of the composition on the keratinous materials. The solvents can be chosen from hydrocarbon-based

solvents, silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain, and a mixture of these solvents.

The volatile oil(s), in one embodiment, may be present in an amount ranging up to and including 95.5%, relative to the total weight of the composition, such as, for example, from 2% to 75% or, as a further example, from 10% to 45%. This amount will be adapted by a person skilled in the art according to the desired staying power or long wearing properties.

The at least one liquid fatty phase of the compositions of the invention may further comprises a dispersion of lipid vesicles. The compositions of the invention may also, for example, be in the form of a fluid anhydrous gel, a rigid anhydrous gel, a fluid simple emulsion, a fluid multiple emulsion, a rigid simple emulsion or a rigid multiple emulsion. The simple emulsion or multiple emulsion may comprise a continuous phase chosen from an aqueous phase optionally containing dispersed lipid vesicles, or a fatty phase optionally containing dispersed lipid vesicles. In one embodiment, the composition has a continuous oily phase or fatty phase and is an anhydrous composition, for example, in stick or dish form. An anhydrous composition is one that has less than 10% water by weight, such as, for example, less than 5% by weight.

Additional Components

The compositions of the invention may further comprise at least one additional fatty material. The at least one additional fatty material may, for example, be chosen from gums, fatty materials that are pasty or viscous at ambient temperature, and resins.

Needless to say, the compositions of the invention should be cosmetically and/or dermatologically acceptable, *i.e.*, they should contain a non-toxic physiologically acceptable medium and should be able to be applied to human keratinous materials. Thus, the composition of the present invention, in one embodiment, may comprise a physiologically acceptable medium, *e.g.*, a physiologically acceptable oil or solvent. For purposes of the

invention, "cosmetically and/or dermatologically acceptable" means that compositions of the invention have a pleasant appearance, odor, and taste.

The compositions of the present invention may also further comprise at least one suitable additive commonly used in the field concerned chosen from coloring agents, antioxidants, essential oils, preserving agents, fragrances, fillers, pasty fatty substances, waxy fatty substances, neutralizing agents, liposoluble or lipodispersible gelling agents, liposoluble polymers, and cosmetically active agents and dermatological active agents, *i.e.*, an agent having a beneficial effect on keratinous materials, such as, for example, emollients, moisturizers, vitamins, essential fatty acids, and sunscreens. The compositions of the invention may also further comprise water, optionally thickened with an aqueous-phase thickener or gelled with a hydrophilic gelling agent and/or containing ingredients soluble in water. The at least one additive may be present in an amount ranging from 0.01% to 20%, such as, for example, from 0.01% to 10%, by weight, relative to the total weight of the composition.

In one embodiment, the at least one suitable additive is chosen from at least one wax. As used herein, a "wax" may be any lipophilic fatty compound which is soluble in the liquid fatty phase, unlike most fillers of pigments. Non-limiting examples of such waxes include waxes of natural origin, such as beeswax, carnauba wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax, sugar cane wax, paraffin waxes, lignite wax, microcrystalline waxes, lanolin wax, montan wax and ozokerites, hydrogenated oils such as hydrogenated jojoba oil, jojoba esters, waxes of synthetic origin, such as polyethylene waxes derived from polymerization of ethylene, waxes obtained by Fischer-Tropsch synthesis, fatty acid esters and glycerides, and silicone waxes such as derivatives of poly(di)methylsiloxane.

In one embodiment, the at least one wax may be present in the composition in an amount up to 3%, and in another embodiment, in an amount of at least 3%, such as up to 30% or up to 50%. In one embodiment,

the wax may be present in an amount ranging from 0.05% to 15% relative to the total weight of the composition, such as from 0.1% to 10%. The at least one wax may, for example, have a melting point greater then about 45°C, such as, for example, greater than about 55°C.

Needless to say, the person skilled in the art will take care to select the optional additional additives and the amounts thereof such that not all of the possible advantageous properties of the composition according to the invention are, or are substantially, adversely affected by the addition(s) envisaged.

The compositions of the invention may also comprise at least one coloring agent chosen from pigments, dyes, nacreous pigments (*i.e.*, nacres), and pearling agents. The at least one coloring agent may be chosen, for example, in order to obtain make-up compositions which give good coverage, that is, which do not leave a significant amount of the at least one keratinous material to which it is applied showing through. The pigments may also reduce the sticky feel of the compositions, unlike soluble dyes. In one embodiment, the coloring agents are pigments (nacreous or non-nacreous).

Representative liposoluble dyes which may be used according to the present invention include Sudan red, DC Red 17, DC Green 6, β-carotene, soybean oil, Sudan brown, DC Yellow 11, DC Violet 2, DC Orange 5, quinoline yellow, and annatto. The liposoluble dyes, when present, may be present in an amount ranging up to 20% by weight of the total weight of the composition, such as from 0.1% to 6%.

The pigments which may be used according to the present invention may be chosen from white, colored, mineral, organic, coated and uncoated pigments. Representative examples of mineral pigments include titanium dioxide, optionally surface-treated, zirconium oxide, zinc oxide, cerium oxide, iron oxides, chromium oxides, manganese violet, ultramarine blue, chromium hydrate and ferric blue. Representative examples of organic pigments include carbon black, pigments of D & C type, and lakes based on cochineal

carmine, barium, strontium, calcium and aluminum. If present, the pigments may have an amount ranging up to 40% by weight of the total weight of the composition, such as from 1% to 35%, and further such as from 2% to 25%.

The nacreous pigments (or nacres) which may be used according to the present invention may be chosen from white nacreous pigments such as mica coated with titanium or with bismuth oxychloride, colored nacreous pigments such as titanium mica with iron oxides, titanium mica with ferric blue or chromium oxide, titanium mica with an organic pigment chosen from those mentioned above, and nacreous pigments based on bismuth oxychloride. The nacres, if present, may have an amount ranging up to 30% by weight of the total weight of the composition, such as from 0.1% to 20%. In one embodiment, the coloring agents are pigments.

An embodiment of the invention relates to a keratinous material care, make-up, or treatment composition comprising a structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer, *e.g.*, a polyamide polymer, comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and at least one film-forming silicone resin.

Additionally, an embodiment of the invention relates to a keratinous material care make-up, or treatment composition comprising a structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton, *e.g.*, a polyamide polymer, comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom, at least one film-forming silicone resin, and at least one coloring agent.

Additionally, an embodiment of the invention relates to a method of caring for, treating, or making up at least one keratinous material comprising applying to the at least one keratinous material a structured composition comprising at least one liquid fatty phase structured with at least one

structuring polymer, *e.g.*, a polyamide polymer, comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and at least one film-forming silicone resin.

One embodiment of the present invention is a cosmetic process for caring for, making up, or treating at least one keratinous material, such as that of a human being, comprising the application to the at least one keratinous material a cosmetic composition comprising at least one polyamide polymer comprising a polyamide skeleton and at least one film-forming silicone resin. The polyamide skeleton comprises at least one end group with at least one chain chosen from alkyl chains comprising at least four carbon atoms and alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group. The polyamide skeleton may further comprise at least one pendant group with at least one chain chosen from alkyl chains comprising at least four carbon atoms and alkenyl chains comprising at least four carbon atoms, bonded to any carbon or nitrogen of the polyamide skeleton via at least one linking group.

In another embodiment, the present invention is directed to a process of making a cosmetic composition in the form of a physiologically acceptable composition, comprising including in the composition at least one structuring polymer, *e.g.*, a polyamide polymer, comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom. The polymer skeleton comprises at least one end group with at least one chain chosen from alkyl chains comprising at least four carbon atoms and alkenyl chains comprising at least four carbon atoms, bonded to the at least one polymer skeleton via at least one linking group. The polymer skeleton may further comprise at least one pendant group with at least one chain chosen from alkyl chains comprising at least four carbon atoms and alkenyl chains comprising at least four carbon atoms, bonded to

any carbon or heteroatom of the polymer skeleton via at least one linking group. The composition also comprises at least one film-forming silicone resin.

Another embodiment of the invention relates to a lip composition in stick form comprising at least one continuous liquid fatty phase, at least one film-forming silicone resin and at least one non-waxy structuring polymer having a weight-average molecular mass of less than 100,000.

The packaging and application device for any subject of the invention may be chosen and manufactured by persons skilled in the art on the basis of their general knowledge, and adapted according to the nature of the composition to be packaged. Indeed, the type of device to be used can be, for example, linked to the consistency of the composition,, for example, to its viscosity; it can also depend on the nature of the constituents present in the composition, such as the presence of volatile compounds.

The invention will be illustrated by, but is not intended to be limited to, the following examples. The present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described embodiments are to be considered in all respects as illustrative only and not restrictive. The scope of the invention is, therefore, indicated by the appended claims, rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope.

Example 1. Transfer Resistant Mascara

A transfer resistant mascara was prepared by mixing the following ingredients.

PHASE	INCI NAME	w/w%
A	Isododecane	41.97
	Alkyl Silicone Resin with Alkyl Groups (MK Resin)	7.00
	Isododecane Gel (Versagel MD 870)	16.50
	Quaternium 18 Hectorite	4.00
	Black Iron Oxide	5.00
B	Propylene Carbonate	1.32
C	Paraffin	3.00
	Carnauba Wax	5.20
	Beeswax	7.00
	Synthetic Beeswax	4.00
	Uniclear 100	5.00
	Phenoxyethanol	0.01

Phases A, B, and C were each prepared separately by mixing together the ingredients of each phase. The three phases were then combined and the resulting mascara was found to have transfer resistant properties upon application to eye lashes.

Example 2. Transfer Resistant Mascara

A transfer resistant mascara was prepared from the following ingredients.

PHASE	INCI NAME	w/w%
A	Isododecane	40.4
	Trimethylsiloxysilicate	7.0
	Isododecane with	14.0
	a) styrene-ethylene/butylene-styrene triblock copolymer, and	1.2
	b) styrene-ethylene/propylene radial copolymer	1.2
	Disteardimonium Hectorite	5.5

	Iron Oxides	5.0
B	Propylene Carbonate	1.8
C	Allyl stearate/VA copolymer	5.0
	Waxes	16.8
	Preservatives	0.01
	Uniclear 100	5.00

Phase A was mixed with a homogenizer for 20 minutes at room temperature and then heated to 65°C for 15 minutes. In a separate beaker, phase C was combined with propeller mixing and heated to 85-90°C. Once phase A and phase C reached their respective temperatures, phase C was added to phase A. The batch was homogenized for 5 minutes while maintaining the heat at 80-85°C and phase B was added. The mixture was homogenized for 30 minutes at 80-85°C and then removed from the homogenizer and cooled to 30-35°C using sweep mixing. The ingredients were combined and the resulting mascara was found to have transfer resistant properties upon application to eye lashes.

WHAT IS CLAIMED IS:

1. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin.

2. The composition according to claim 1, wherein the composition is in a form chosen from a fluid anhydrous gel, rigid anhydrous gel, fluid simple emulsion, rigid simple emulsion, fluid multiple emulsion, and rigid multiple emulsion.

3. A structured anhydrous composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom and at least one film-forming silicone resin.

4. An anhydrous composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin.

5. An anhydrous composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least three hydrocarbon-based repeating units comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin.

6. An anhydrous composition according to claim 5,

wherein said at least three hydrocarbon-based repeating units are identical.

7. The composition according to one of claims 1-6, wherein said at least one structuring polymer further comprises at least one of:

at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.

8. The composition according to claim 7, wherein said alkyl chains and said alkenyl chains each comprise at least four carbon atoms.

9. The composition according to one of claims 7 or 8, wherein said alkyl chains and said alkenyl chains each comprise from 8 to 120 carbon atoms.

10. The composition according to one of claims 7-9, wherein said alkyl chains and said alkenyl chains each comprise from 12 to 68 carbon atoms.

11. The composition according to one of claims 7-10, wherein said at least one linking group is chosen from single bonds and urea, urethane, thiourea, thiourethane, thioether, thioester, ester, ether and amine groups.

12. The composition according to one of claims 7-11, wherein said at least one linking group is chosen from urea, ester, and amine groups.

13. The composition according to one of claims 7-12, wherein said at least one linking group is chosen from ester and amine groups.

14. The composition according to one of claims 7-13, wherein said at least one linking group is an ester group present in a proportion ranging from 15% to 40% of the total number of all ester and heteroatom groups in the at least one structuring polymer.

15. The composition according to one of claims 7-14, wherein said at least one linking group is an ester group present in a proportion ranging from 20% to 35% of the total number of all ester and heteroatom groups in the at least one structuring polymer.

16. The composition according to one of claims 7-15, wherein said at least one terminal fatty chain is functionalized.

17. The composition according to one of claims 7-16, wherein said at least one pendant fatty chain is functionalized.

18. The composition according to one of claims 7-17, wherein in said at least one structuring polymer, the percentage of the total number of fatty chains ranges from 40% to 98%, relative to the total number of all repeating units and fatty chains in the at least one structuring polymer.

19. The composition according to one of claims 7-18, wherein in said at least one structuring polymer, the percentage of the total number of fatty chains ranges from 50% to 95%, relative to the total number of all repeating units and fatty chains in the at least one structuring polymer.

20. The composition according to one of claims 1-19, wherein said at least one structuring polymer has a weight-average molecular mass of less than 100,000.

21. The composition according to one of claims 1-20, wherein said at least one structuring polymer has a weight-average molecular mass of less than 50,000.

22. The composition according to one of claims 1-21, wherein said at least one structuring polymer has a weight-average molecular mass ranging from 1000 to 30,000.

23. The composition according to one of claims 1-22, wherein said at least one hydrocarbon based repeating unit comprises from 2 to 80 carbon atoms.

24. The composition according to one of claims 1-23, wherein said at least one heteroatom of said at least one hydrocarbon-based repeating unit is chosen from nitrogen, sulphur, and phosphorus.

25. The composition according to claim 24, wherein said at least one heteroatom is a nitrogen atom.

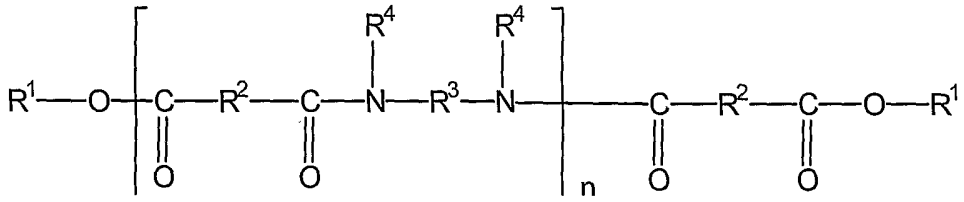
26. The composition according to one of claims 1-25, wherein said at least one heteroatom is combined with at least one atom chosen from oxygen and carbon to form a heteroatom group.

27. The composition according to claim 26, wherein said at least one heteroatom group is chosen from amide groups, carbamate groups, and urea groups.

28. The composition according to one of claims 26 or 27, wherein said at least one heteroatom group is an amide group and said polymer skeleton is a polyamide skeleton.

29. The composition according to one of claims 26-28, wherein said at least one heteroatom group is chosen from carbamate groups and urea groups and said polymer skeleton is chosen from a polyurethane skeleton, a polyurea skeleton and a polyurethane-polyurea skeleton.

30. The composition according to one of claims 1-29, wherein said at least one structuring polymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- R^1, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- R^2, which are identical or different, are each chosen from C_4 to C_{42} hydrocarbon-based groups, with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon-based groups;

- R^3, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R^3 comprises at least 2 carbon atoms; and

- R^4, which are identical or different, are each chosen from hydrogen atoms, C_1 to C_{10} alkyl groups and a direct bond to at least one group chosen from R^3 and another R^4 such that when said at least one group is chosen from another R^4, the nitrogen atom to which both R^3 and R^4 are bonded forms part of a heterocyclic structure defined in part by R^4-N-R^3, with the proviso that at least 50% of all R^4 are chosen from hydrogen atoms.

31. The composition according to claim 30, wherein in said formula (I), n is an integer ranging from 1 to 5.

32. The composition according to one of claims 30 or 31, wherein in said formula (I), said alkyl groups of R^1 and said alkenyl groups of R^1 each independently comprise from 4 to 24 carbon atoms.

33. The composition according to one of claims 30-32, wherein in said formula (I), R^1, which are identical or different, are each chosen from C_{12} to C_{22} alkyl groups.

34. The composition according to one of claims 30-33, wherein in said formula (I), R^1, which are identical or different, are each chosen from C_{16} to C_{22} alkyl groups.

35. The composition according to one of claims 30-34, wherein in said formula (I), R^2, which are identical or different, are each chosen from C_{10}

to C_{42} hydrocarbon based groups, with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon based groups.

36. The composition according to one of claims 30-35, wherein in said formula (I), R^3, which can be identical or different, are each chosen from C_2 to C_{36} hydrocarbon-based groups and polyoxyalkylene groups.

37. The composition according to one of claims 30-36, wherein R^3, which can be identical or different, are each chosen from C_2 to C_{12} hydrocarbon-based groups.

38. The composition according to one of claims 30-37, wherein in said formula (I), R^4, which can be identical or different, are each chosen from hydrogen atoms.

39. The composition according to one of claims 30-38, wherein said at least one polymer of formula (I) is in the form of a mixture of polymers, wherein said mixture optionally also comprises a polymer of formula (I) wherein n is equal to zero.

40. The composition according to one of claims 1-39, wherein said at least one structuring polymer has a softening point greater than 50°C.

41. The composition according to one of claims 1-40, wherein said at least one structuring polymer has a softening point ranging from 65°C to less than 150°C.

42. The composition according to one of claims 1-41, wherein said at least one structuring polymer has a softening point ranging from 70°C to less than 130°C.

43. The composition according to one of claims 1-42, wherein said at least one structuring polymer is present in the composition in an amount ranging from 0.5% to 80% by weight, relative to the total weight of the composition.

44. The composition according to one of claims 1-43, wherein said at least one structuring polymer is present in the composition in an amount

ranging from 2% to 60% by weight, relative to the total weight of the composition.

45. The composition according to one of claims 1-44, wherein said composition has a hardness ranging from 20 gf to 2000 gf.

46. The composition according to one of claims 1-45, wherein said composition has a hardness ranging from 30 gf to 250 gf.

47. The composition according to one of claims 1-46, wherein said at least one liquid fatty phase of the composition comprises at least one oil, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil, each having an affinity with said at least one structuring polymer.

48. The composition according to claim 47, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 40 to 24 carbon atoms, said chains optionally being chosen from cyclic, linear and branched, saturated and unsaturated chains;

- synthetic oils or esters of formula R_5COOR_6 in which R_5 is chosen from cyclic, linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and R_6 is chosen from hydrocarbon-based chains comprising from 1 to 40 carbon atoms, with the proviso that $R_5 + R_6 \geq 10$;

- synthetic ethers containing from 10 to 40 carbon atoms;

- C_8 to C_{26} fatty alcohols; and

- C_8 to C_{26} fatty acids.

49. The composition according to claim 47, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;

- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms;

- phenylsilicones; and

- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

50. The composition according to one of claims 1-49, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

51. The composition according to claim 50, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

52. The composition according to one of claims 1-51, wherein said at least one liquid fatty phase is present in an amount ranging from 1% to 99.4% by weight, relative to the total weight of the composition.

53. The composition according to one of claims 1-52, wherein said at least one liquid fatty phase is present in an amount ranging from 10% to 80% by weight, relative to the total weight of the composition.

54. The composition according to one of claims 1-53, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

55. The composition according to claim 54, wherein said at least one volatile solvent is present in an amount up to 95.5% by weight, relative to the total weight of the composition.

56. The composition according to one of claims 54 or 55, wherein said at least one volatile solvent is present in an amount ranging from 10% to 45% by weight, relative to the total weight of the composition.

57. The composition according to one of claims 1-56, wherein said composition further comprises at least one additional fatty material.

58. The composition according to claim 57, wherein said at least one additional fatty material is chosen from gums, fatty materials pasty or viscous at ambient temperature, and resins.

59. The composition according to one of claims 1-58, wherein said at least one film-forming silicone resin is chosen from silsesquioxanes and siloxysilicates.

60. The composition according to claim 59, wherein said silsesquioxanes comprise repeating units of $(RSiO_{3/2})_x$, where X is less than 2000.

61. The composition according to claim 60, wherein x is 500 or less.

62. The composition according to claim 59, wherein said silsesquioxanes are chosen from polymethylsilsesquioxanes comprising repeating units of formula $(CH_3SiO_{3/2})$.

63. The composition according to claim 59, wherein said siloxysilicates are chosen from trimethylsiloxysilicates.

64. The composition according to claim 63, wherein said trimethylsiloxysilicates comprise repeating units of $[(CH_3)_3\text{-}Si\text{-}O]_x\text{-}(SiO_{4/2})_y$, where x ranges from 50 to 80 and y ranges from 50 to 80.

65. The composition according to claim 62, wherein said polymethylsilsesquioxanes comprising repeating units of formula $(CH_3SiO_{3/2})$ further comprise up to 1% of polymerized repeating units of formula $(CH_3)_2SiO_{2/2}$.

66. The composition according to one of claims 1-65, wherein the at least one film-forming silicone resin comprises at least two units chosen from M, D, T, and Q and said at least two units satisfy the relationship $R_nSiO_{(4-n)/2}$, wherein n is a value ranging from 1.0 to 1.50.

67. The composition according to claim 66, wherein said at least one film-forming silicone resin is a solid at 25°C.

68. The composition according to claim 66, wherein said at least one film-forming silicone resin has a weight average molecular weight ranging from 1000 to 10,000 grams/mole.

69. The composition according to one of claims 1-68, wherein said at least one film-forming silicone resin comprises repeating M units and repeating Q units.

70. The composition according to claim 69, wherein the ratio of M units to Q units is 0.7:1.

71. The composition according to one of claims 1-70, wherein said at least one film-forming silicone resin is present in the composition in an amount ranging from 1% to 10% by weight, relative to the total weight of the composition.

72. The composition according to one of claims 1-71, wherein said composition further comprises at least one additional film-former.

73. The composition according to one of claims 1-72, wherein said composition is a solid.

74. The composition according to one of claims 1-73, wherein said composition is a solid chosen from molded and poured sticks.

75. The composition according to one of claims 1-74, further comprising at least one fatty alcohol.

76. The composition according to claim 75, wherein said at least one fatty alcohol is chosen from C_8 to C_{26} fatty alcohols.

77. The composition according to one of claims 75 or 76, wherein said at least one fatty alcohol is chosen from C_{12} to C_{20} fatty alcohols.

78. The composition according to one of claims 75-77, wherein said C_{12} to C_{20} fatty alcohols are chosen from myristyl alcohol, cetyl alcohol, stearyl alcohol and behenyl alcohol.

79. The composition according to one of claims 75-78, wherein said at least one fatty alcohol is present in an amount ranging from 0.1% to 15.0% by weight, relative to the weight of the composition.

80. The composition according to one of claims 75-79 wherein said at least one fatty alcohol is present in an amount ranging from 0.5% to 8.0% by weight, relative to the weight of the composition.

81. The composition according to one of claims 1-80, further comprising at least one oil-soluble polymer.

82. The composition according to claim 81, wherein said at least oil-soluble polymer is chosen from alkylated guar gums and alkyl celluloses.

83. The composition according to one of claims 81 or 82, wherein said at least one oil-soluble polymer is present in an amount ranging from 0.05% to 10% by weight, relative to the weight of the composition.

84. The composition according to one of claims 81-83, wherein said at least one oil-soluble polymer is present in an amount ranging from 0.1% to 3% by weight, relative to the weight of the composition.

85. The composition according to one of claims 1-84, further comprising at least one oil-soluble cationic surfactant.

86. The composition according to claim 85, wherein said at least one oil-soluble cationic surfactant is chosen from quaternary ammonium compounds, fatty amines, and salts of fatty amines.

87. The composition according to one of claims 85 or 86, wherein said at least one oil-soluble cationic surfactant is present in an amount ranging from 0.1% to 10% by weight, relative to the weight of the composition.

88. The composition according to one of claims 85-87, wherein said at least one oil-soluble cationic surfactant is present in an amount ranging from 0.5% to 2% by weight, relative to the weight of the composition.

89. The composition according to one of claims 1-88, further comprising at least one wax.

90. The composition according to claim 89, wherein said at least one wax is chosen from carnauba wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax, sugar cane wax, paraffin waxes, lignite wax, microcrystalline waxes, lanolin wax, montan wax, polyethylene waxes, waxes

obtained by Fischer-Tropsch synthesis, silicone waxes, ozokerites, hydrogenated jojoba oil, fatty acid esters, and fatty acid ester glycerides.

91. The composition according to one of claims 89 or 90, wherein said at least one wax is present in an amount ranging from 0.5% to 15 %, relative to the total weight of said composition.

92. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer, wherein said at least one structuring polymer is at least one polyamide polymer comprising:

a polymer skeleton which comprises at least one amide repeating unit; and

(ii) at least one film-forming silicone resin.

93. The composition according to claim 92, wherein said at least one polyamide polymer is chosen from polymers resulting from at least one polycondensation reaction between at least one dicarboxylic acid comprising at least 32 carbon atoms and at least one amine chosen from diamines comprising at least 2 carbon atoms and triamines comprising at least 2 carbon atoms.

94. The composition according to claim 93, wherein said at least one dicarboxylic acid comprises from 32 to 44 carbon atoms and said at least one amine comprises from 2 to 36 carbon atoms.

95. The composition according to one of claims 93 or 94, wherein said at least one dicarboxylic acid is chosen from dimers of at least one fatty acid comprising at least 16 carbon atoms.

96. The composition according to one of claims 93-95, wherein said at least one fatty acid is chosen from oleic acid, linoleic acid and linolenic acid.

97. The composition according to one of claims 93-96, wherein said at least one amine is chosen from ethylenediamine, hexylenediamine, hexamethylenediamine, phenylenediamine and ethylenetriamine.

98. The composition according to one of claims 93-97, wherein said at least one polyamide polymer is chosen from polymers comprising at least one terminal carboxylic acid group.

99. The composition according to claim 98, wherein said at least one terminal carboxylic acid group is esterified with at least one alcohol chosen from monoalcohols comprising at least 4 carbon atoms.

100. The composition according to one of claims 92-99, wherein said at least one film-forming silicone resin is chosen from silsesquioxanes and siloxysilicates.

101. The composition according to claim 100, wherein said silsesquioxanes comprise repeating units of $(RSiO_{3/2})_x$, where X is less than 2000.

102. The composition according to claim 101, wherein x is 500 or less.

103. The composition according to claim 100, wherein said silsesquioxanes are chosen from polymethylsilsesquioxanes comprising repeating units of formula $(CH_3SiO_{3/2})$.

104. The composition according to claim 100, wherein said siloxysilicates are chosen from trimethylsiloxysilicates.

105. The composition according to claim 104, wherein said trimethylsiloxysilicates comprise repeating units of $[(CH_3)_3\text{-}Si\text{-}O]_x\text{-}(SiO_{4/2})_y$, where x ranges from 50 to 80 and y ranges from 50 to 80.

106. The composition according to claim 103, wherein said polymethylsilsesquioxanes comprising repeating units of formula $(CH_3SiO_{3/2})$ further comprise up to 1% of polymerized repeating units of formula $(CH_3)_2SiO_{2/2}$.

107. The composition according to one of claims 92-106, wherein the at least one film-forming silicone resin comprises at least two units chosen from M, D, T, and Q and said at least two units satisfy the relationship $R_nSiO_{(4-n)/2}$, wherein n is a value ranging from 1.0 to 1.50.

108. The composition according to claim 107, wherein said at least one film-forming silicone resin is a solid at 25°C.

109. The composition according to claim 107, wherein said at least one film-forming silicone resin has a weight average molecular weight ranging from 1000 to 10,000 grams/mole.

110. The composition according to one of claims 92-109, wherein said at least one film-forming silicone resin comprises repeating M units and repeating Q units.

111. The composition according to claim 110, wherein the ratio of M units to Q units is 0.7:1.

112. The composition according to one of claims 92-111, wherein said at least one film-forming silicone resin is present in the composition in an amount ranging from 1% to 10% by weight, relative to the total weight of the composition.

113. The composition according to one of claims 92-112, wherein said composition further comprises at least one additional film-former.

114. The composition according to one of claims 92-113, wherein the composition is in a form chosen from a fluid anhydrous gel, rigid anhydrous gel, fluid simple emulsion, rigid simple emulsion, fluid multiple emulsion, and rigid multiple emulsion.

115. The composition according to one of claims 92-114, wherein said composition is a solid.

116. The composition according to one of claims 92-115, further comprising at least one wax.

117. A foundation, mascara, eye liner, concealer, lipstick, blush for cheeks or eyelids, body makeup, sun screen, colorant for skin or hair, skin care formula, shampoo, after shampoo treatment, or makeup removing product comprising:

at least one liquid fatty phase in said foundation, mascara, eye liner, concealer, lipstick, blush for cheeks or eyelids, body makeup, sun screen,

colorant for skin or hair, skin care formula, shampoo, after shampoo treatment, or makeup removing product which comprises:

(i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin.

118. An anhydrous deodorant comprising:

at least one liquid fatty phase in said deodorant which comprises:

(i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin.

119. A make-up and/or care and/or treatment composition for at least one keratinous material comprising:

at least one liquid fatty phase in said composition which comprises:

(i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin.

120. A lip composition in stick form comprising at least one continuous liquid fatty phase, at least one film-forming silicone resin, and at least one non-waxy structuring polymer having a weight-average molecular mass of less than 100,000 in said lip composition.

121. A make up, care, or treatment composition for the skin or lips comprising a structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, at least one film-forming silicone resin, and at least one coloring agent.

122. A treatment, care or make-up composition for at least one keratinous material comprising a structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom, at least one film-forming silicone resin, and at least one coloring agent.

123. A structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom, wherein the at least one structuring polymer further comprises at least one terminal fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group chosen from amides, ureas, and esters, wherein when said at least one linking group is chosen from esters, said at least one terminal fatty chain is chosen from branched alkyl groups and at least one film-forming silicone resin.

124. A structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one heteroatom, wherein the at least one structuring polymer further comprises at least one pendant fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group chosen from amides, ureas, and esters, wherein when said at least one linking group is chosen from esters, said at least one pendant fatty chain is chosen from branched alkyl groups and at least one film-forming silicone resin.

125. A method for care, make up, or treatment of at least one keratinous material, comprising applying to said at least one keratinous material a cosmetic composition comprising:

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

(ii) at least one film-forming silicone resin.

126. A method for making a cosmetic composition in the form of a physiologically acceptable composition comprising including in said composition at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin.

127. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

(ii) at least one film-forming silicone resin.

128. A method for providing at least one property of resistance to shear and stability to a cosmetic composition, comprising including in said cosmetic composition a cosmetic composition at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom; and

(ii) at least one film-forming silicone resin,

and further wherein said at least one structuring polymer and said at least one film-forming silicone resin are present in a combined amount effective to provide at least one property chosen from resistance to shear and stability to said composition.

129. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising: a polymer skeleton which comprises a) at least one hydrocarbon-based repeating unit comprising at least one heteroatom and b) at least one of:

- at least one terminal fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

- at least one pendant fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group; and

(ii) at least one film-forming silicone resin.