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(54) Title: COSMETIC KIT FOR PROVIDING A HYDROPHOBIC FILM

(57) Abstract: The present invention relates to a cosmetic kit for colouring the hair and/or for care and/or make-up of keratinous substance(s) comprising at least two different compositions packaged separately, the kit comprising at least some hydrophobic solid particles, one or more compounds X, one or more compounds Y, and at least one catalyst, at least one of the compounds X or Y being a silicone compound, provided that the compounds X, Y and the catalyst are not present simultaneously in the same composition, said compounds X and Y being capable of reacting with one another by a hydrosilylation reaction in the presence of a catalyst, when they are brought into contact with one another, and the hydrophobic solid particles are present in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.



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Cosmetic kit for providing a hydrophobic film

The present invention aims primarily to offer a cosmetic kit that can be used for forming, on the surface of a keratinous substance, a deposit possessing improved resistance to hydrophilic compounds.

5 Generally, it is necessary to provide the various types of cosmetic deposits on the surface of a keratinous substance with a certain level of water resistance.

 Thus, it is important that a mascara should have good resistance to the liquid in tears. The same applies to a lipstick coming regularly into contact with saliva, or a liquid.

10 Similarly, a foundation, applied on the skin of the face, must possess sufficient resistance to sweat.

 Moreover, for obvious reasons, polish applied to the surface of the nails must withstand regular contact with water.

 This is also a requirement in the area of cosmetic care, notably with respect to sun-tan products which, for obvious reasons, must be resistant to water, in particular salt
15 water.

 Finally, in the field of hair care, good resistance of the various hair care products applied to the surface of the hair, such as hairdressing gels or lacquers for example, is required notably with respect to rain water.

20 A certain number of cosmetic formulations intended for the various keratinous substances mentioned above have already been developed for these purposes. However, the products currently available are not completely satisfactory.

 The present invention therefore has the specific aim of offering novel cosmetic formulations that are more satisfactory in these respects.

25 It should be noted that this desire to enhance the hydrophobicity of certain substrates with respect to water is also encountered in other fields of industry. Thus, in the area of building materials, for example, it is already proposed to apply a coating to the surface of these materials that can form a texture, namely a succession of elevations and depressions for significantly reducing the area of contact between water and its surface, thus ensuring better imperviousness of the substrate.

30 In fact, this solution aims to reproduce artificially a surface architecture that exists naturally, notably in plants and in particular on the leaf of the lotus. Thus, the surface of this leaf is composed of hydrophobic greasy materials, which are arranged in a

random succession of elevations and depressions. Contact of the water droplets is generally limited to the surface of the crests of the elevations.

Reproduction of this textured effect, also called the lotus effect, has notably already been considered in documents EP 772 514, US 6 858 284 and US 7 083 828, for
5 the production of coatings endowed with improved hydrophobicity. These coating compositions are primarily intended to be applied to flat surfaces such as glass, for example, or objects.

The inventors have now found that such an effect can be reproduced durably for cosmetic deposits for make-up and/or care and/or shaping and/or holding, provided that
10 hydrophobic solid particles and specific compounds, notably silicone compounds, capable of forming, after interaction, a polymer film endowed with good properties of adhesion, are combined in the compositions that are intended to form these deposits.

Thus, compounds called compound X and compound Y, as defined hereunder, prove to be capable of polymerizing *in situ* if necessary in the presence of a catalyst or a
15 peroxide, at atmospheric pressure and at room temperature, and forming films that are advantageously biocompatible, covering, and endowed with good cohesion.

Such systems are notably described partly in documents WO 01/96450 and GB 2 407 496 of Dow Corning.

The inventors have thus discovered that the application of specific
20 combinations of hydrophobic solid particles as described hereafter, with compounds of this type in cosmetic compositions, is able to endow deposits of these compositions on the surface of keratinous substances with a significant "lotus effect" and moreover with advantageous properties in cosmetic terms, namely good adhesion, good durability and comfort.

25

Thus, the present invention relates, according to a first aspect, to a cosmetic kit for colouring the hair and/or care and/or make-up of keratinous substance(s) comprising at least two different compositions packaged separately, the kit comprising at least some hydrophobic solid particles, one or more compounds X, one or more compounds Y, and
30 optionally at least one catalyst or a peroxide, at least one of the compounds X or Y being a silicone compound, said compounds X and Y being capable of react with one another by a hydrosilylation reaction in the presence of a catalyst, or by a condensation reaction, or by a

crosslinking reaction in the presence of a peroxide, when they are brought into contact with one another, in which the compounds X, Y and the catalyst or the peroxide when they are present, are not present simultaneously in the same composition, and the hydrophobic solid particles are present in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.

The compound or compounds X, the compound or compounds Y, can be applied on keratinous substances from several compositions containing hydrophobic solid particles, the compound or compounds X, the compound or compounds Y, and if necessary the catalyst or the peroxide individually or mixed, or from a single composition containing the compound or compounds X, the compound or compounds Y, the hydrophobic solid particles, and if necessary the catalyst or the peroxide.

According to a particular embodiment of the invention, the kit comprises at least:

i. a first composition comprising, in a physiologically acceptable medium, at least one compound X, and

ii. a second composition comprising, in a physiologically acceptable medium, at least one compound Y,

with at least one of said first and second compositions additionally including at least the hydrophobic solid particles, and at least one of the first and second compositions additionally including, if necessary, at least one catalyst or a peroxide.

The first and second compositions are different from one another.

For example, the first composition is advantageously devoid of compound Y and the second composition is advantageously devoid of compound X. In fact, in view of their great reactivity with one another, compounds X and Y are not present simultaneously in a first and/or second composition forming a kit according to the invention when their interaction is not dependent on the presence of a catalyst or a peroxide.

However, at the moment of application or just before, compounds X and Y can be mixed together and can be present in one and the same composition, resulting from mixing the first and second compositions forming the kit according to the invention.

Preferably, the compositions in the kit, and in particular the first composition that includes compound X and the second composition that includes compound Y in the kit are packaged in separate packaging.

For example, each composition can be packaged separately in the same packaging article, for example in a two-compartment pen, the base composition being delivered by one end of the pen and the top composition being delivered by the other end of the pen, each end being closed notably hermetically with a cap. Each composition can also be packaged in a compartment within the same packaging article, the two compositions being mixed at the end or ends of the packaging article during delivery of each composition.

Alternatively, each of the first and second compositions can be packaged in a different packaging article.

The present invention also relates to a cosmetic composition, notably for colouring the hair and/or care and/or make-up of keratinous substance(s) containing, in a physiologically acceptable medium, at least one compound X, a compound Y, if necessary at least one catalyst or a peroxide, and hydrophobic solid particles as defined above, with at least one of the compounds X and Y being in an encapsulated form.

According to a preferred embodiment, the two compounds X and Y are present in separate encapsulated forms.

According to this embodiment, the two compounds X and Y can be packaged in one and the same composition while avoiding the risk of premature reaction between them. The reaction only occurs at the moment when the composition is manipulated prior to or at the moment of its application on the keratinous substance. The encapsulated form or forms break apart on drying and compounds X and Y can react to form the expected film.

The cosmetic kits considered according to the invention can be, for example, kits for make-up, for colouring and/or care of a keratinous substance, notably of the skin, the integumentary appendages, the lips or the hair.

It can notably be a kit for make-up of keratinous substance(s), for example a kit for make-up of the skin of the face, or a kit for care of keratin fibre(s), for example a kit for hair care.

The keratinous substances can in particular be keratin fibres, for example the hair.

The invention also relates, according to another of its aspects, to a cosmetic method for colouring the hair and/or care and/or make-up of keratinous substance(s)

comprising at least the application (a) of at least some hydrophobic solid particles, (b) of one or more compounds X, (c) of one or more compounds Y, with at least one of the compounds X and Y being a silicone compound and said compounds X and Y being capable of reacting with one another by a hydrosilylation reaction in the presence of a catalyst, or by a condensation reaction, or by a crosslinking reaction in the presence of a peroxide, when they are brought into contact with one another, and (d) if necessary of at least one catalyst or a peroxide, and the applications (a), (b), (c) and (d) can be simultaneous or consecutive in any order provided that it is favourable to the interaction of said compounds X and Y, said hydrophobic solid particles being used in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.

Thus, according to one embodiment, the invention relates to a cosmetic method comprising at least the application on said keratinous substances of at least:

- a layer of a first composition comprising, in a physiologically acceptable medium, one or more compounds X, and
 - a layer of a second composition comprising, in a physiologically acceptable medium, one or more compounds Y,
- at least one of the first and second compositions additionally including at least some hydrophobic solid particles and, if necessary, at least one catalyst or a peroxide, and the compounds X and Y and the hydrophobic solid particles being as defined previously.

Thus, the compound or compounds X, the compound or compounds Y, can be applied on the keratinous substances from several compositions, the compositions comprising respectively the compound or compounds X, the compound or compounds Y, the hydrophobic solid particles, and if necessary the catalyst or the peroxide on their own or mixed, or from a single composition comprising the compound or compounds X, the compound or compounds Y, the hydrophobic solid particles and if necessary the catalyst or the peroxide.

According to a particular embodiment of the invention, a composition (A) comprising the compound or compounds X, the compound or compounds Y, the hydrophobic solid particles, and, if necessary the catalyst or the peroxide is applied on the keratinous substance.

Composition (A) can for example result from the extemporaneous mixing of compositions comprising respectively the said compound or compounds X, the said

compound or compounds Y, said hydrophobic solid particles and, if necessary, the catalyst or the peroxide.

According to another particular embodiment of the invention, a composition (B) comprising the hydrophobic solid particles and a composition (C) comprising the compound or compounds X and the compound or compounds Y are applied on the keratinous substances, compositions (B) and (C) being applied in any order, and at least one of the compositions (B) and (C) additionally including at least the catalyst or the peroxide.

According to another particular embodiment of the invention, a composition (B) comprising the hydrophobic solid particles, a composition (D) comprising the compound or compounds X and a composition (E) comprising the compound or compounds Y, are applied on the keratinous substance, compositions (B), (D) and (E) being applied in any order, and at least one of the compositions (B), (D) and (E) additionally including, if necessary, at least the catalyst or the peroxide.

According to another particular embodiment, a composition (F) comprising the compound or compounds X and the hydrophobic solid particles, and a composition (E) comprising the compound or compounds Y, are applied on the keratinous substance, compositions (F) and (E) being applied in any order, and at least one of the compositions (F) and (E) additionally including, if necessary, at least the catalyst or the peroxide.

According to another particular embodiment of the invention, a composition (D) comprising the compound or compounds X and a composition (G) comprising the compound or compounds Y and the hydrophobic solid particles, are applied on the keratinous substance, compositions (D) and (G) being applied in any order, and at least one of the compositions (D) and (G) additionally including, if necessary, at least the catalyst or the peroxide.

According to another particular embodiment of the invention, the catalyst, when it is necessary for reaction of compound X with compound Y considered in the kit according to the invention, is present in the composition containing the compound or compounds X or in the composition containing the compound or compounds Y.

The catalysts advantageously selected are those that are described hereunder.

According to a preferred embodiment of the invention, at least one composition containing either the compound or compounds X, or the compound or compounds Y, in

addition contains hydrophobic solid particles.

According to the method of the invention, at least compound X can be present in a first composition, and at least compound Y can be present in a second composition. The hydrophobic solid particles can be present in at least one of said first and second
5 compositions, and at least one of said first and second compositions additionally including, if necessary, at least one catalyst or a peroxide, or can be present in a third composition comprising at least one physiologically acceptable medium, and at least one of said first, second and third compositions additionally including, if necessary, at least one catalyst or a peroxide.

10 According to one embodiment of the invention, the first and second compositions can be mixed, in an extemporaneous way, prior to application.

In the sense of the invention, notably in the embodiment where the composition is obtained as described above, namely by mixing, in an extemporaneous way, a first composition containing at least compound X and a second composition containing at
15 least compound Y, it is to be understood that the mixture thus formed comprises compounds X and/or Y in a form that has not yet reacted and not exclusively in the form of their reaction product by hydrosilylation, by condensation and/or by crosslinking in the presence of a peroxide.

Thus, formation of the reaction product according to the invention can either be
20 carried out directly on the surface of the keratinous substance that is to be treated, or initiated just before application by extemporaneous mixing of compounds X and Y in conditions favourable for their interaction, formation of the reaction product being in the latter case finalized on the surface of the keratinous substance.

For obvious reasons, and in view of the great reactivity of compounds X and/or
25 Y, it is in fact necessary that their application should be carried out in conditions that are favourable for the manageability of the composition containing it (or them) notably with respect to its spreading, for example. The method according to the invention therefore employs a composition containing compounds X and Y, and therefore not congealed in the form of the expected final film and resulting from reaction of all of X and/or of all of Y.

30 According to a first particular embodiment, the method according to the invention comprises at least the following successive steps:

- (i) the extemporaneous mixing of a first composition comprising at least one compound X and of a third composition comprising at least some solid particles,
- (ii) application of the mixture obtained at the end of step (i) on all or part of at least one keratinous substance, and
- 5 - (iii) application of a second composition comprising at least one compound Y, at least one of said first, second and third compositions additionally including, if necessary, at least one catalyst or a peroxide, said steps being carried out in the order (i), (ii) and (iii).

According to a second embodiment, the method according to the invention
10 comprises at least the following successive steps:

- (i) extemporaneous mixing of a first composition comprising at least one compound X and of a second composition comprising at least one compound Y,
- (ii) application of the mixture obtained at the end of step (i) on all or part of at least one keratinous substance, and
- 15 - (iii) application of a third composition comprising at least some solid particles, at least one of said first, second and third compositions additionally including, if necessary, at least one catalyst or a peroxide, said steps being carried out in the order (i), (ii) and (iii).

According to yet another embodiment, at least one layer of at least one
20 supplementary composition comprising a cosmetically acceptable medium, and preferably at least one film-forming polymer and at least one organic (or oily) or aqueous solvent medium, is applied on the layer or layers of the composition or compositions comprising the compounds X and Y, if necessary the catalyst or the peroxide and the hydrophobic solid particles, in order for example to improve the durability and/or the comfort of the
25 latter.

Within the scope of the application of a cosmetic method according to the invention in the area of hair care, the first step can be preceded by the application of a hair product: a care product, shampoo, after-shampoo, coloration, decoloration, permanent wave, straightening.

30 The method of the invention can also comprise one or more additional intermediate or final steps such as the application of a cosmetic product, hairstyling, a rinsing step, a drying step. Thus, in the method of the invention, at least one step can be

interrupted by hairstyling, rinsing or drying, preferably drying.

Drying can be carried out under a hair-dryer, with a portable hair dryer and/or with smoothing tongs, or by infrared drying.

It is also possible to carry out multiple applications of the composition of the invention to obtain a superposition of layers to achieve specific properties of the deposit in terms of chemical nature, mechanical resistance, thickness, appearance, feel.

It may be advantageous, according to the invention, to carry out a drying step between two successive steps of the various methods of application considered above, and notably for the second embodiment.

Moreover, it may be advantageous to carry out a drying step following application of the last composition.

According to one embodiment, the composition applied can combine the two compounds X and Y and if necessary the catalyst or the peroxide necessary for the interaction of compounds X and Y with at least one of them being in an encapsulated form.

Thus, the present invention also relates to a cosmetic composition, notably for care and/or for make-up of keratinous substances, containing, in a physiologically acceptable medium, some hydrophobic solid particles, one or more compounds X, one or more compounds Y, with at least one of the compounds X and Y being a silicone compound and said compounds X and Y being capable of reacting with one another by a hydrosilylation reaction in the presence of a catalyst or by a condensation reaction, or by a crosslinking reaction in the presence of a peroxide, when they are brought into contact with one another, and if necessary the catalyst or the peroxide necessary for the interaction of compounds X and Y with at least one of the compounds from among the compounds X, Y and the catalyst or peroxide if present, being in an encapsulated form.

According to a preferred embodiment, the two compounds X and Y are present in separate encapsulated forms.

According to this embodiment, the two compounds X and Y can be packaged in one and the same composition while avoiding the risk of premature reaction between them. This reaction only takes place at the moment when the composition is manipulated prior to or at the moment of its application on the keratinous substance. The encapsulated form or forms break apart on drying and the compounds X and Y can then react, if necessary in the presence of a catalyst or a peroxide, to form the expected film.

The invention relates, according to yet another of its aspects, to the use of hydrophobic solid particles, of at least one compound X, and of at least one compound Y, said compounds X and Y being as defined previously, and optionally of at least one
5 catalyst or of a peroxide, for example in a cosmetic kit as considered according to the invention, to obtain a hydrophobic film with the lotus effect, which is comfortable and has good cohesion.

Advantageously, the hydrophobic solid particles can be used according to this use at a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1
10 to 1/2, for example from 20/1 to 1/2, notably from 20/1 to 1/1, and preferably from 10/1 to 2/1.

As stated previously, the kit, the composition and the method according to the invention are particularly advantageous in that they provide, on the surface of the keratinous substances, deposits or films possessing a high degree of hydrophobicity, also
15 called "lotus effect".

Lotus effect

The lotus effect is the name given to a physical phenomenon of interaction between water droplets and a hydrophobic surface, studied notably by Barthlott and
20 Neinhuis in the 1970s.

It is known that a drop of water deposited on a smooth hydrophobic surface forms a contact angle of just over 90°. Now, it has been observed that this angle increases considerably in the presence of microasperities, and can even reach 180°. Such an increase caused by this so-called "superhydrophobic" state is characteristic of the lotus effect.
25

Solid particles

The solid particles that can be used according to the present invention can be of mineral or organic origin, porous or non-porous, coloured or non-coloured.

They can be of any morphology, preferably spherical.

30 The solid particles that can be used according to the invention are hydrophobic.

In the sense of the invention, hydrophobic means solid particles that do not disperse spontaneously in water, either on account of their nature, or because their surface

has been modified, in particular by coating or as a result of a chemical treatment.

The coatings that may be suitable within the scope of the present invention can notably be hydrocarbon-containing, siliconized, fluorinated or fluoro-siliconized.

As examples, we may notably mention:

- 5 - coating with hydrocarbon compounds, for example isopropyl triisostearoyl titanate, and aluminium stearoyl glutamate,
- coating with silicone compounds, for example polydimethylsiloxanes (PDMS), polymethylhydrogenosiloxanes (methicone), polyalkoxydimethylsiloxanes, trialkoxyalkylsilanes, and notably n-octyl triethoxysilane, silicone acrylate copolymers,
- 10 silicone resins (trimethylsiloxysilicates), and silicone elastomers,
- coating with fluorinated compounds, for example perfluoroalkyl phosphates, perfluoropolyethers, polytetrafluoropolyethylene (PTFE), and perfluoroalkanes, and
- coating with fluoro-silicone compounds, for example perfluoroalkyldimethicones and perfluoroalkyltrialkoxysilanes.

15 The hydrophobic treatment agent can also be selected from fatty acids, such as stearic acid; metal soaps, such as aluminium dimyristate, the aluminium salt of hydrogenated tallow glutamate; amino acids; N-acylated amino acids or their salts; lecithin, isopropyl triisostearoyl titanium; and mixtures thereof.

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

The hydrophobic solid particles considered according to the invention can be
25 selected from solid particles that are naturally hydrophobic, solid particles whose surface has been rendered hydrophobic, and mixtures thereof.

As examples of solid particles that are naturally hydrophobic, we may notably mention:

- polytetrafluoroethylene powders, such as PTFE Ceridust 9205F from
30 CLARIANT with average particle size 8 μm ;
- silicone resin powders, such as the silicone resins Tospearl 145A from GE Silicone with average particle size 4.5 μm ;

- hollow hemispherical silicone particles, such as NLK 500, NLK 506 and NLK 510 from Takemoto Oil and Fat;
- powders of acrylic copolymers, notably of polymethyl methacrylate (PMMA), such as the PMMA particles Jurymer MBI from Nihon Junyoki with average
5 particle size 8 μm , the hollow PMMA spheres sold under the name Covabead LH85 by the company Wackherr, the polymethyl methacrylate microspheres marketed under the name MICROSPHERE M-100 by the company Matsumoto; or the microspheres marketed under the name MICROPEARL F 80 ED by the company Matsumoto;
- wax particles, such as the paraffin wax particles MicroEase 114S from
10 MICROPOWDERS with average particle size 7 μm ;
- polyethylene powders, notably comprising at least one ethylene/acrylic acid copolymer, and in particular constituted of ethylene/acrylic acid copolymers such as the particles Flobeads EA 209 from Sumitomo (with average particle size 10 μm);
- powders of crosslinked elastomeric organopolysiloxane coated with
15 silicone resin, notably silsesquioxane resin, such as described for example in patent US 5 538 793. Said elastomer powders are sold under the names "KSP-100", "KSP-101", "KSP-102", "KSP-103", "KSP-104", "KSP-105" by the company SHIN ETSU;
- polyamide (Nylon®) powders, for example the particles of Nylon 12 of the Orgasol type from Atofina with average particle size 10 μm ;
- microspheres based on acrylic copolymers, such as those of ethylene
20 glycol dimethacrylate/lauryl methacrylate copolymer sold by the company Dow Corning under the name of POLYTRAP;
- expanded powders such as hollow microspheres, and notably the microspheres formed from a terpolymer of vinylidene chloride, acrylonitrile and methacrylate and marketed under the name EXPANCEL by the company Kemanord Plast
25 under the references 551 DE 12 (particle size of about 12 μm and density 40 kg/m^3), 551 DE 20 (particle size of about 30 μm and density 65 kg/m^3), 551 DE 50 (particle size of about 40 μm);
- powders of ethylene-acrylate copolymer, such as those marketed under
30 the name FLOBEADS by the company Sumitomo Seika Chemicals;
- lauroyl-lysine;
- and mixtures thereof.

As examples of solid particles whose surface has been rendered hydrophobic, we may mention:

- 5 - the fumed silicas having trimethylsiloxy hydrophobic groups, for example marketed under the references Aerosil R 812, Aerosil R 812S, Aerosil R 8200 by the company Degussa, CAB-O-SIL TS-530 by the company Cabot, or the silicas having dimethylsilyloxy or polydimethylsiloxane hydrophobic groups, for example marketed under the references Aerosil R 972, Aerosil R 974 by the company Degussa, and CAB-O-SIL TS-610, CAB-O-SIL TS-720 by the company Cabot, or the silicas having alkylsiloxy
10 hydrophobic groups, for example marketed under the reference Aerosil R 805 by the company Degussa, and the modified hydrophobic silicas such as TEGOTOP 105 from the company Degussa;
- talc coated with polydimethylsiloxane sold under the reference Talc DS 34 by the company Toshiki Pigment;
- 15 - boron nitride coated with polymethylhydrogenosiloxane sold under the reference UHP 1107 by the company Carborundum;
- red iron oxide coated with dimethicone sold under the reference SA-C 338075 - 10 by the company Miyoshi Kasei;
- DC Red 7 coated with Gransil GCM 10% sold by the company Coletica;
- 20 - titanium nano-oxide coated with polydimethylsiloxane sold under the reference UV Titan M262 by the company Kemira;
- zinc nano-oxide coated with polydimethylsiloxane sold under the reference Z-COTE HP-1 by the company BASF;
- yellow iron oxide coated with perfluoroalkyl phosphate sold under the
25 reference PF 5 Yellow 601 by the company Daito Kasei;
- red iron oxide coated with perfluoroalkyl phosphate sold under the reference PF 5 Red R 516L by the company Daito Kasei;
- black iron oxide coated with perfluoroalkyl phosphate sold under the reference PF 5 Black BL 100 by the company Daito Kasei;
- 30 - titanium dioxide coated with perfluoroalkyl phosphate sold under the reference PF 5 TiO₂ CR 50 by the company Daito Kasei;
- yellow iron oxide coated with perfluoropolymethylisopropylether sold

under the reference Yellow iron oxide BF-25-3 by the company Toshiki;

- DC Red 7 coated with perfluoropolymethylisopropylether sold under the reference D&C Red 7 FHC by the company Cardre Inc.;

5 - DC Red 6 coated with PTFE sold under the reference T 9506 by the company Warner – Jenkinson;

- boron nitride coated with perfluoroperhydrophenanthrene sold under the reference Boron nitride TBN12 by the company Saint Gobain Advanced Ceramics;

- red iron oxide coated with isopropyl triisostearoyl titanate sold under the reference BRO-I 2 by the company Kobo;

10 - yellow iron oxide coated with isopropyl triisostearoyl titanate sold under the reference BYO-I 2 by the company Kobo;

- black iron oxide coated with isopropyl triisostearoyl titanate sold under the reference BBO-I 2 by the company Kobo;

15 - titanium dioxide coated with isopropyl triisostearoyl titanate sold under the reference BTD-401 by the company Kobo;

- pigments coated with fatty acid, for example the products sold under the commercial references NAI-C33-8073-10, NAI-C33-8075, NAI-C47-051-10, NAI-C33-115, NAI-C33-134, NAI-C33-8001-10, NAI-C33-7001-10 and NAI-C33-9001-10 by the company Miyoshi Kasei,

20 - and mixtures thereof.

According to one embodiment of the invention, the hydrophobic solid particles considered according to the invention can be dispersed in an apolar medium.

The solid particles that can be used according to the present invention have a number-average size of the primary particles between 1 nm and 100 μm , for example
25 between 1 nm and 30 μm , preferably between 1 nm and 1 μm , or even between 1 nm and 100 nm, notably between 4 nm and 80 nm, for example between 4 nm and 50 nm, preferably between 5 nm and 20 nm.

According to one embodiment of the invention, the hydrophobic solid particles comprise hydrophobic fumed silicas with average size of the primary particles between
30 4 nm and 50 nm, preferably between 5 nm and 20 nm.

The solid particles considered according to the invention can be present at a content ranging from 0.1 to 50 wt.%, for example from 0.5 to 30 wt.%, preferably from 1

to 20 wt.%, or even from 5 to 20 wt.%, and preferably from 10 to 15 wt.% relative to the total weight of the composition containing them.

As stated previously, the hydrophobic solid particles considered according to the invention are employed in a range of weight ratio that is adjusted with respect to the compounds X and Y to allow the required effect to be displayed.

In particular, the hydrophobic solid particles are present in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.

According to a particular embodiment said ratio varies from 20/1 to 1/2, for example from 20/1 to 1/1, and preferably from 10/1 to 2/1.

COMPOUNDS X AND Y

Silicone compound means a polyorganosiloxane compound, i.e. comprising at least two organosiloxane units, for example at least 5 organosiloxane units, notably at least 10 organosiloxane units. According to a particular embodiment, at least one of compounds X and Y, or compounds X and compounds Y are silicone compounds. Compounds X and Y can be aminated or non-aminated.

According to another embodiment, at least one of compounds X and Y is a polymer whose main chain is formed primarily of organosiloxane units. Among the silicone compounds mentioned below, some may display both film-forming and adhesive properties, depending for example on their proportion of silicone or depending on whether they are used mixed with a particular additive. It is therefore possible to adjust the film-forming properties or the adhesive properties of said compounds according to the proposed use, which is the case in particular for the so-called "room temperature vulcanization" reactive elastomeric silicones.

Compounds X and Y can react with each other at a temperature varying between room temperature and 180°C. Advantageously, compounds X and Y are capable of reacting together at room temperature ($20 \pm 5^\circ\text{C}$) and atmospheric pressure, or advantageously in the presence of a catalyst, by a hydrosilylation reaction or a condensation reaction, or a crosslinking reaction in the presence of a peroxide.

Polar groups

According to a particular embodiment, at least one of compounds X and Y, for example compound X, bears at least one polar group that is able to form at least one hydrogen bond with keratinous substances.

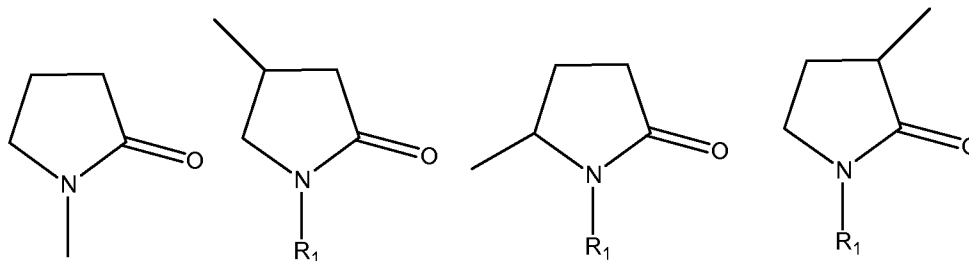
5 By polar group, we mean a group having carbon atoms and hydrogen atoms in its chemical structure and at least one heteroatom (such as O, N, S and P), such that said group is able to establish at least one hydrogen bond with keratinous substances.

Compounds bearing at least one group that can form a hydrogen bond are particularly advantageous, as they endow the compositions containing them with better
10 adherence on keratinous substances.

The polar group or groups borne by at least one of compounds X and Y is/are able to establish a hydrogen bond, and include either a hydrogen atom bound to an electronegative atom, or an electronegative atom for example an oxygen, nitrogen or sulphur atom. When the group has a hydrogen atom bound to an electronegative atom, the
15 hydrogen atom can interact with another electronegative atom borne for example by another molecule, such as keratin, to form a hydrogen bond. When the group has an electronegative atom, the electronegative atom can interact with a hydrogen atom bound to an electronegative atom borne for example by another molecule, such as keratin, to form a hydrogen bond.

20 Advantageously, these polar groups can be selected from the following groups:

- carboxylic acids -COOH,
- alcohols, such as: -CH₂OH or -CH(R)OH, R being an alkyl radical having from 1 to 6 carbon atoms,
- amino of formula -NR₁R₂, in which R₁ and R₂, which may be identical or
25 different, represent an alkyl radical having from 1 to 6 carbon atoms or one of R₁ or R₂ denotes a hydrogen atom, and the other one of R₁ and R₂ represents an alkyl radical having from 1 to 6 carbon atoms,
- pyridino,
- amido of formula -NH-COR' or -CO-NH-R' in which R' represents a
30 hydrogen atom or an alkyl radical having from 1 to 6 carbon atoms,
- pyrrolidino preferably selected from the groups of formula:



R₁ being an alkyl radical having from 1 to 6 carbon atoms,

- carbamoyl of formula -O-CO-NH-R' or -NH-CO-OR', R' being as defined above,

5 - thiocarbamoyl such as -O-CS-NH-R' or -NH-CS-OR', R' being as defined above,

- ureyl such as -NR'-CO-N(R')₂, the groups R', which may be identical or different, being as defined above,

10 - sulphonamido such as -NR'-S(=O)₂-R', R' corresponding to the above definition.

Preferably, these polar groups are present at a content less than or equal to 10 wt.% relative to the weight of each compound X or Y, preferably less than or equal to 5 wt.%, for example at a content ranging from 1 to 3 wt.%.

15 The polar group or groups can be located in the main chain of compound X and/or Y or can be pendant from the main chain or located at the ends of the main chain of compound X and/or Y.

1- Compounds X and Y capable of reacting by hydrosilylation

20 According to one embodiment, the invention relates to a cosmetic kit for colouring the hair and/or care and/or make-up of keratinous substance(s) comprising at least two different compositions packaged separately, the kit comprising at least some hydrophobic solid particles, one or more compounds X, one or more compounds Y and at least one catalyst, at least one of the compounds X or Y being a silicone compound, provided that the compounds X, Y and the catalyst are not present simultaneously in the same composition, said compounds X and Y being capable of reacting with one another by a hydrosilylation reaction in the presence of a catalyst when they are brought into contact with one another, and the hydrophobic solid particles are present in a weight ratio

25

atoms, in particular a methyl radical or alternatively a phenyl group, preferably a methyl radical,

- m is equal to 1 or 2 and

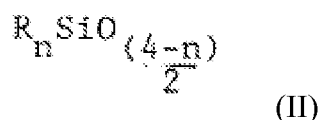
- R' represents:

- 5 ○ an unsaturated aliphatic hydrocarbon group having from 2 to 10, preferably from 3 to 5 carbon atoms, for example a vinyl group or a group -R"-CH=CHR'" in which R" is a divalent aliphatic hydrocarbon chain, having from 1 to 8 carbon atoms, bound to the silicon atom and R'" is a hydrogen atom or an alkyl radical having
10 from 1 to 4 carbon atoms, preferably a hydrogen atom; we may mention, as group R', the vinyl and allyl groups and mixtures thereof; or
- an unsaturated cyclic hydrocarbon group having from 5 to 8 carbon atoms, for example a cyclohexenyl group.

15 Preferably R' is an unsaturated aliphatic hydrocarbon group, preferably a vinyl group.

 According to one embodiment, R represents an alkyl radical having from 1 to 10 carbon atoms or alternatively a phenyl group, and preferably a methyl radical, and R' is a vinyl group.

20 According to a particular embodiment, the polyorganosiloxane also contains units of formula:



in which R is a group as defined previously, and n is equal to 1, 2 or 3.

25 According to a variant, compound X can be a silicone resin comprising at least two ethylenic unsaturations, said resin being capable of reacting with compound Y by hydrosilylation in the presence of a catalyst. We may mention for example the resins of type MQ or MT which themselves bear -CH=CH₂ unsaturated reactive end groups.

These resins are crosslinked organosiloxane polymers.

The class of the silicone resins is known by the name "MDTQ", the resin being

described in relation to the different siloxane monomer units that it contains, each of the letters "MDTQ" characterizing a type of unit.

The letter M represents the monofunctional unit of formula $(\text{CH}_3)_3\text{SiO}_{1/2}$, the silicon atom being bound to a single oxygen atom in the polymer comprising said unit.

5 The letter D denotes a bifunctional unit $(\text{CH}_3)_2\text{SiO}_{2/2}$ in which the silicon atom is bound to two oxygen atoms.

The letter T represents a trifunctional unit of formula $(\text{CH}_3)\text{SiO}_{3/2}$.

In units M, D, T defined above, at least one of the methyl groups can be substituted with a group R other than the methyl group, such as a hydrocarbon radical (notably alkyl) having from 2 to 10 carbon atoms or a phenyl group or alternatively a hydroxyl group.

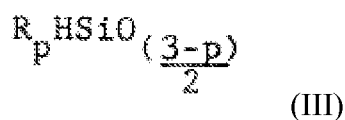
10 Finally, the letter Q denotes a tetrafunctional unit $\text{SiO}_{4/2}$ in which the silicon atom is bound to four hydrogen atoms which are themselves attached to the rest of the polymer. As examples of said resins, we may mention the MT silicone resins such as poly(phenyl-vinylsilsequioxane) such as that marketed under the reference SST-3PV1 by the company Gelest.

Preferably, compounds X have from 0.01 to 1 wt.% of unsaturated aliphatic groups.

20 Advantageously, compound X is selected from the polyorganopolysiloxanes, notably those comprising the siloxane units (I) and optionally (II) described previously.

Compound Y preferably has at least two free Si-H groups (hydrogenosilane groups).

Compound Y can be selected advantageously from the polyorganosiloxanes comprising at least one alkylhydrogenosiloxane unit of the following formula:



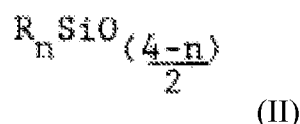
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in which:

R represents a linear or cyclic, monovalent hydrocarbon group, having from 1

to 30 carbon atoms, for example an alkyl radical having from 1 to 30 carbon atoms, preferably from 1 to 20 and better still from 1 to 10 carbon atoms, in particular a methyl radical, or alternatively a phenyl group and p is equal to 1 or 2. Preferably R is a hydrocarbon group, preferably methyl.

5 These polyorganosiloxane compounds Y with alkylhydrogenosiloxane units can additionally contain units of formula:



as defined above.

10 Compound Y can be a silicone resin comprising at least one unit selected from the units M, D, T, Q as defined above and comprising at least one Si-H group such as the poly(methyl-hydridosilsesquioxane) marketed under the reference SST-3MH1.1 by the company Gelest.

Preferably, these polyorganosiloxane compounds Y have from 0.5 to 2.5 wt.% of Si-H groups.

15 Advantageously, the radicals R represent a methyl group in formulae (I), (II), (III) above.

Preferably, these polyorganosiloxanes Y have end groups of formula $(\text{CH}_3)_3\text{SiO}_{1/2}$.

20 Advantageously, the polyorganosiloxanes Y have at least two alkylhydrogenosiloxane units of formula $-(\text{H}_3\text{C})(\text{H})\text{SiO}-$ and optionally include $-(\text{H}_3\text{C})_2\text{SiO}-$ units.

These polyorganosiloxane compounds Y with hydrogenosilane groups are described for example in document EP 0465744.

25 According to one variant, compound X is selected from the organic oligomers or polymers (by organic, we mean compounds whose main chain is not a silicone chain, preferably compounds not containing silicon atoms) or from hybrid organic/silicone polymers or oligomers, said oligomers or polymers bearing at least 2 unsaturated reactive aliphatic groups, compound Y being selected from the polyorganosiloxanes Y with

hydrogenosilane groups mentioned above.

According to one embodiment, the organic or hybrid organic/silicone compounds X bearing at least 2 unsaturated reactive aliphatic groups, have at least one polar group as described above.

5 Compound X, of organic nature, can then be selected from the vinylic, (meth)acrylic polymers or oligomers, polyesters, polyurethanes and/or polyureas, polyethers, perfluoropolyethers, polyolefins such as polybutene, polyisobutylene, dendrimers or organic hyperbranched polymers, or mixtures thereof.

10 In particular, the organic polymer or the organic moiety of the hybrid polymer can be selected from the following polymers:

a) polyesters with ethylenic unsaturation(s):

15 This is a group of polymers of the polyester type having at least 2 ethylenic double bonds, randomly distributed in the main chain of the polymer. These unsaturated polyesters are obtained by polycondensation of a mixture:

20 - of linear or branched aliphatic or cycloaliphatic dicarboxylic acids notably having 3 to 50 carbon atoms, preferably from 3 to 20 and better still from 3 to 10 carbon atoms, such as adipic acid or sebacic acid, of aromatic dicarboxylic acids notably having from 8 to 50 carbon atoms, preferably from 8 to 20 and better still from 8 to 14 carbon atoms, such as phthalic acids, notably terephthalic acid, and/or of dicarboxylic acids derived from dimers of fatty acids with ethylenic unsaturations such as the dimers of oleic or linoleic acids described in application EP-A-959 066 (paragraph [0021]) marketed under the designations Pripol[®] by the company Unichema or Empol[®] by the company Henkel, all said diacids having to be free from polymerizable ethylenic double bonds,

25 - of linear or branched aliphatic or cycloaliphatic diols notably having from 2 to 50 carbon atoms, preferably from 2 to 20 and better still from 2 to 10 carbon atoms, such as ethylene glycol, diethylene glycol, propylene glycol, 1,4-butanediol or cyclohexanedimethanol, of aromatic diols having from 6 to 50 carbon atoms, preferably from 6 to 20 and better still from 6 to 15 carbon atoms such as bisphenol A and bisphenol B, and/or of diol dimers resulting from reduction of dimers of fatty acids as

defined previously, and

- of one or more dicarboxylic acids or their anhydrides having at least one polymerizable ethylenic double bond and having from 3 to 50 carbon atoms, preferably from 3 to 20 and better still from 3 to 10 carbon atoms, such as maleic acid, fumaric acid or itaconic acid.

b) polyesters with (meth)acrylate side and/or end groups:

This is a group of polymers of the polyester type obtained by polycondensation of a mixture:

- of linear or branched aliphatic or cycloaliphatic dicarboxylic acids notably having from 3 to 50 carbon atoms, preferably from 3 to 20 and better still from 3 to 10 carbon atoms, such as adipic acid or sebacic acid, of aromatic dicarboxylic acids notably having from 8 to 50 carbon atoms, preferably from 8 to 20 and better still from 8 to 14 carbon atoms, such as phthalic acids, notably terephthalic acid, and/or of dicarboxylic acids derived from dimers of fatty acids with an ethylenic unsaturation such as the dimers of oleic or linoleic acids described in application EP-A-959 066 (paragraph [0021]) marketed under the designations Pripol® by the company Unichema or Empol® by the company Henkel, all said diacids having to be free from polymerizable ethylenic double bonds,

- of linear or branched aliphatic or cycloaliphatic diols notably having from 2 to 50 carbon atoms, preferably from 2 to 20 and better still from 2 to 10 carbon atoms, such as ethylene glycol, diethylene glycol, propylene glycol, 1,4-butanediol or cyclohexanedimethanol, of aromatic diols having from 6 to 50 carbon atoms, preferably from 6 to 20 and better still from 6 to 15 carbon atoms such as bisphenol A and bisphenol B, and

- of at least one ester of (meth)acrylic acid and of a diol or polyol having from 2 to 20 carbon atoms, preferably from 2 to 6 carbon atoms, such as 2-hydroxyethyl (meth)acrylate, 2-hydroxypropyl (meth)acrylate and glycerol methacrylate.

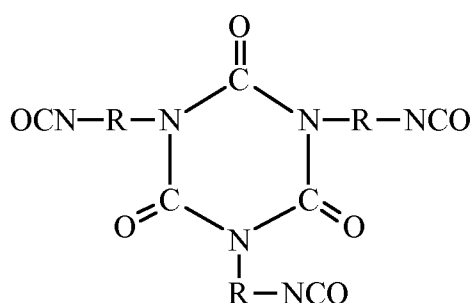
These polyesters differ from those described above in section a) by the fact that the ethylenic double bonds are not located in the main chain but on side groups or at the end of the chains. These ethylenic double bonds are those of the (meth)acrylate groups present in the polymer.

Such polyesters are marketed for example by the company UCB under the designations EBECRYL® (EBECRYL® 450: molecular weight 1600, on average 6 acrylate functions per molecule, EBECRYL® 652: molecular weight 1500, on average 6 acrylate functions per molecule, EBECRYL® 800: molecular weight 780, on average 4 acrylate functions per molecule, EBECRYL® 810: molecular weight 1000, on average 4 acrylate functions per molecule, EBECRYL® 50 000: molecular weight 1500, on average 6 acrylate functions per molecule).

c) polyurethanes and/or polyureas with (meth)acrylate groups, obtained by polycondensation:

- of aliphatic, cycloaliphatic and/or aromatic diisocyanates, triisocyanates and/or polyisocyanates notably having from 4 to 50, preferably from 4 to 30 carbon atoms, such as hexamethylenediisocyanate, isophoronediiisocyanate, toluenediisocyanate, diphenylmethanediisocyanate or isocyanurates of formula:

15



resulting from the trimerization of 3 molecules of diisocyanates OCN-R-CNO, where R is a linear, branched or cyclic hydrocarbon radical having from 2 to 30 carbon atoms;

20 - of polyols, notably of diols, free from polymerizable ethylenic unsaturations, such as 1,4-butanediol, ethylene glycol or trimethylolpropane, and/or of polyamines, notably of aliphatic, cycloaliphatic and/or aromatic diamines, notably having from 3 to 50 carbon atoms, such as ethylenediamine or hexamethylenediamine, and

25 - of at least one ester of (meth)acrylic acid and of a diol or polyol having from 2 to 20 carbon atoms, preferably from 2 to 6 carbon atoms, such as 2-hydroxyethyl

(meth)acrylate, 2-hydroxypropyl (meth)acrylate and glycerol methacrylate.

These polyurethanes/polyureas with acrylate groups are marketed for example under the designation SR 368 (tris(2-hydroxyethyl)isocyanurate-triacrylate) or CRAYNOR® 435 by the company CRAY VALLEY, or under the designation
5 EBECRYL® by the company UCB (EBECRYL® 210: molecular weight 1500, 2 acrylate functions per molecule, EBECRYL® 230: molecular weight 5000, 2 acrylate functions per molecule, EBECRYL® 270: molecular weight 1500, 2 acrylate functions per molecule, EBECRYL® 8402: molecular weight 1000, 2 acrylate functions per molecule, EBECRYL® 8804: molecular weight 1300, 2 acrylate functions per molecule,
10 EBECRYL® 220: molecular weight 1000, 6 acrylate functions per molecule, EBECRYL® 2220: molecular weight 1200, 6 acrylate functions per molecule, EBECRYL® 1290: molecular weight 1000, 6 acrylate functions per molecule, EBECRYL® 800: molecular weight 800, 6 acrylate functions per molecule).

We may also mention the water-soluble aliphatic diacrylate polyurethanes
15 marketed under the designations EBECRYL® 2000, EBECRYL® 2001 and EBECRYL® 2002, and the diacrylate polyurethanes in aqueous dispersion marketed under the trade names IRR® 390, IRR® 400, IRR® 422 IRR® 424 by the company UCB.

d) polyethers with (meth)acrylate groups obtained by esterification, by
20 (meth)acrylic acid, of the hydroxyl end groups of homopolymers or of C₁₋₄ alkylene glycol copolymers, such as polyethylene glycol, polypropylene glycol, copolymers of ethylene oxide and of propylene oxide preferably having a weight-average molecular weight below 10 000, polyethoxylated or polypropoxylated trimethylolpropane.

Di(meth)acrylate polyoxyethylenes of suitable molecular weight are marketed
25 for example under the designations SR 259, SR 344, SR 610, SR 210, SR 603 and SR 252 by the company CRAY VALLEY or under the designation EBECRYL® 11 by UCB. Polyethoxylated trimethylolpropane triacrylates are marketed for example under the designations SR 454, SR 498, SR 502, SR 9035, SR 415 by the company CRAY VALLEY or under the designation EBECRYL® 160 by the company UCB. Polypropoxylated
30 trimethylolpropane triacrylates are marketed for example under the designations SR 492 and SR 501 by the company CRAY VALLEY.

e) epoxyacrylates obtained by reaction between

- at least one diepoxide selected for example from:

(i) bisphenol A diglycidyl ether,

5 (ii) a diepoxy resin resulting from the reaction between bisphenol A diglycidyl ether and epichlorohydrin,

(iii) an epoxyester resin with α,ω -diepoxy end groups resulting from the condensation of a dicarboxylic acid having from 3 to 50 carbon atoms with a stoichiometric excess of (i) and/or (ii),

10 (iv) an epoxyether resin with α,ω -diepoxy end groups resulting from the condensation of a diol having from 3 to 50 carbon atoms with a stoichiometric excess of (i) and/or (ii),

(v) natural or synthetic oils bearing at least 2 epoxide groups, such as epoxidized soya oil, epoxidized linseed oil and epoxidized vernonia oil,

15 (vi) a phenol-formaldehyde polycondensate (Novolac[®] resin), of which the end groups and/or side groups have been epoxidized,

and

20 - one or more carboxylic acids or carboxylic polyacids having at least one ethylenic double bond at α,β of the carboxyl group such as (meth)acrylic acid or crotonic acid or esters of (meth)acrylic acid and of a diol or polyol having from 2 to 20 carbon atoms, preferably from 2 to 6 carbon atoms such as 2-hydroxyethyl (meth)acrylate.

Such polymers are marketed for example under the designations SR 349, SR 601, CD 541, SR 602, SR 9036, SR 348, CD 540, SR 480, CD 9038 by the company
25 CRAY VALLEY, under the designations EBECRYL[®] 600 and EBECRYL[®] 609, EBECRYL[®] 150, EBECRYL[®] 860, EBECRYL[®] 3702 by the company UCB and under the designations PHOTOMER[®] 3005 and PHOTOMER[®] 3082 by the company HENKEL.

30 f) (C_{1-50} alkyl) poly(meth)acrylates, said alkyl being linear, branched or cyclic, bearing at least two functions with ethylenic double bond carried by the lateral and/or terminal hydrocarbon chains.

Such copolymers are marketed for example under the designations IRR[®] 375,

OTA® 480 and EBECRYL® 2047 by the company UCB.

g) polyolefins such as polybutene, polyisobutylene,

5 h) perfluoropolyethers with acrylate groups obtained by esterification, for example by (meth)acrylic acid, of perfluoropolyethers bearing hydroxyl side and/or end groups.

These α,ω -diol perfluoropolyethers are described notably in EP-A-1057849 and are marketed by the company AUSIMONT under the designation FOMBLIN® Z
10 DIOL.

i) dendrimers and hyperbranched polymers bearing (meth)acrylate or (meth)acrylamide end groups obtained respectively by esterification or amidation of dendrimers and of hyperbranched polymers with hydroxyl or amino terminal functions, by
15 (meth)acrylic acid.

The dendrimers (from the Greek dendron = tree) are "tree-like" polymer molecules, i.e. highly branched, invented by D.A. Tomalia and his team at the beginning of the 1990's (Donald A. Tomalia et al., *Angewandte Chemie, Int. Engl. Ed.*, Vol. 29, No. 2, pages 138 - 175). They are structures constructed around a, generally polyvalent, central unit.
20 Branched chain-extending units are arranged according to a perfectly defined structure around this central unit, thus giving rise to symmetrical, monodispersed macromolecules having a well-defined chemical and stereochemical structure. Dendrimers of the polyamidoamine type are marketed for example under the name STARBURST® by the company DENDRITECH.

25 The hyperbranched polymers are polycondensates, generally of the polyester, polyamide or polyethyleneamine type, obtained from multifunctional monomers, which have a tree-like structure similar to that of the dendrimers but far less regular than the latter (see for example WO-A-93/17060 and WO 96/12754).

The company PERSTORP markets hyperbranched polyesters under the name
30 BOLTORN®. Hyperbranched polyethyleneamines are available under the name COMBURST® from the company DENDRITECH. Hyperbranched poly(esteramide)s with hydroxyl end groups are marketed by the company DSM under the name HYBRANE®.

These dendrimers and hyperbranched polymers, esterified or amidated by acrylic and/or methacrylic acid, differ from the polymers described in sections a) to h) above by the very large number of ethylenic double bonds present. This increased functionality, generally greater than 5, makes them particularly useful in enabling them to act as a
5 "crosslinking node", i.e. a multiple crosslinking site.

It is therefore possible to use these dendritic and hyperbranched polymers in association with one or more of the above polymers and/or oligomers a) to h).

1a - Additional reactive compounds

10 According to one embodiment, the compositions containing compound X and/or Y can additionally comprise an additional reactive compound such as:

- organic or mineral particles having on their surface at least 2 unsaturated aliphatic groups – we may mention for example the silicas surface-treated for example with silicone compounds with vinylic groups such as for example cyclotetramethyltetravinylsiloxane-
15 treated silica,
- silazane compounds such as hexamethyldisilazane.

1b - Catalyst

The hydrosilylation reaction takes place in the presence of a catalyst which can
20 be present with one or other of the compounds X or Y or can be present on its own. For example, this catalyst can be present in the composition in an encapsulated form if the two compounds X and Y, which it must cause to interact, are present in this same composition in an unencapsulated form or conversely it can be contained there in an unencapsulated form if at least one of compounds X and Y is present in the composition in an encapsulated
25 form. The catalyst is preferably based on platinum or tin.

We may mention for example platinum-based catalysts deposited on a support of silica gel or of powdered charcoal, platinum chloride, salts of platinum and of chloroplatinic acids.

The chloroplatinic acids are preferably used in hexahydrate or anhydrous form,
30 which are easily dispersible in organosilicone media.

We may also mention platinum complexes, such as those based on chloroplatinic acid hexahydrate and divinyl tetramethyldisiloxane.

The catalyst can be present at a content in the range from 0.0001 to 20 wt.% relative to the total weight of the composition containing it.

Compounds X and/or Y can be combined with polymerization inhibitors or retarders, and more particularly inhibitors of the catalyst. Non-limitatively, we may mention cyclic polymethylvinylsiloxanes, and in particular tetravinyl tetramethyl cyclotetrasiloxane, acetylenic alcohols, preferably volatile, such as methylisobutynol.

The presence of ionic salts, such as sodium acetate, can have an influence on the rate of polymerization of the compounds.

As an example of a combination of compounds X and Y reacting by hydrosilylation in the presence of a catalyst, we may mention the following references offered by the company Dow Corning: DC 7-9800 Soft Skin Adhesive Parts A & B, as well as the combination of the following mixtures A and B prepared by Dow Corning:

MIXTURE A:

Ingredient (INCI name)	CAS No.	<u>Contents (%)</u>	Function
Dimethyl Siloxane, Dimethylvinylsiloxo- terminal	68083-19- 2	55-95	Polymer
Silica Silylate	68909-20- 6	10-40	Filler
1,3-Diethenyl-1,1,3,3- Tetramethyldisiloxane complexes	68478-92- 2	Trace	Catalyst
Tetramethyldivinyldisiloxane	2627-95-4	0.1-1	Polymer

MIXTURE B:

Ingredient (INCI name)	CAS No.	<u>Contents (%)</u>	Function
Dimethyl Siloxane, Dimethylvinylsiloxo- terminal	68083-19-2	55-95	Polymer
Silica Silylate	68909-20-6	10-40	Filler
Dimethyl, Methylhydrogen Siloxane, trimethylsiloxo- terminal	68037-59-2	1-10	Polymer

Advantageously, compounds X and Y are selected from silicone compounds
 5 capable of reacting by hydrosilylation in the presence of a catalyst; in particular compound
 X is selected from the polyorganosiloxanes comprising units of formula (I) described
 above and compound Y is selected from organosiloxanes comprising
 alkylhydrogenosiloxane units of formula (III) described above.

According to a particular embodiment, compound X is a polydimethylsiloxane
 10 with vinylic end groups, and compound Y is a polymethylhydrogenosiloxane.

2/ Compounds X and Y capable of reacting by condensation

According to one embodiment, the invention relates to a cosmetic kit for
 colouring the hair and/or care and/or make-up of keratinous substance(s) comprising at
 15 least two different compositions packaged separately, the kit comprising at least some
 hydrophobic solid particles, one or more compounds X, one or more compounds Y, and
 optionally at least one catalyst, at least one of the compounds X and Y being a silicone
 compound, provided that the compounds X, Y and the catalyst when it is present, are not
 present simultaneously in the same composition, said compounds X and Y being capable
 20 of reacting with one another by a condensation reaction when they are brought into contact
 with one another, and the hydrophobic solid particles are present in a weight ratio
 (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.

According to this embodiment, compounds X and Y are capable of reacting by

condensation, either in the presence of water (hydrolysis) by reaction of 2 compounds bearing alkoxy silane groups, or by so-called "direct" condensation by reaction of a compound bearing alkoxy silane group(s) and a compound bearing silanol group(s) or by reaction of 2 compounds bearing silanol group(s).

5 When the condensation is carried out in the presence of water, the latter can in particular be the ambient humidity, the residual water of the skin, of the lips, of the eyelashes and/or of the nails, or water from an external source, for example by prior moistening of the keratinous substance (for example by an atomizer, by natural or artificial tears).

10 In this manner of reaction by condensation, compounds X and Y, which may be identical or different, can therefore be selected from silicone compounds whose main chain contains at least two alkoxy silane groups and/or at least two silanol (Si-OH) side groups or end groups.

15 According to one embodiment, compound X and/or compound Y bears at least one polar group, as described above, capable of forming at least one hydrogen bond with keratinous substances.

20 According to an advantageous embodiment, compounds X and/or Y are selected from the polyorganosiloxanes comprising at least two alkoxy silane groups. By "alkoxy silane group", we mean a group comprising at least one -Si-OR moiety, R being an alkyl group having from 1 to 6 carbon atoms.

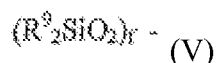
Compounds X and Y are notably selected from the polyorganosiloxanes comprising alkoxy silane end groups, more specifically those which have at least 2 alkoxy silane end groups, preferably trialkoxy silane end groups.

These compounds X and/or Y preferably mostly comprise units of formula:



30 in which the groups R^9 represent, independently of one another, a radical selected from alkyl groups having from 1 to 6 carbon atoms, phenyl groups, fluoroalkyl groups, and s is equal to 0, 1, 2 or 3. Preferably, groups R^9 represent, independently of one another, an alkyl group having from 1 to 6 carbon atoms. As alkyl group, we may notably mention methyl, propyl, butyl, hexyl and mixtures thereof, preferably methyl or ethyl. As fluoroalkyl group, we may mention 3,3,3-trifluoropropyl.

According to a particular embodiment, compounds X and Y, which may be identical or different, are polyorganosiloxanes comprising units of formula:



5 in which R^9 is as described above, preferably R^9 is a methyl radical, and f is such that the polymer advantageously has a viscosity at 25°C in the range from 0.5 to 3000 Pa.s, preferably in the range from 5 to 150 Pa.s; for example f can range from 2 to 5000, preferably from 3 to 3000, and more preferably from 5 to 1000.

10 These polyorganosiloxane compounds X and Y contain at least 2 trialkoxysilane end groups per molecule of polymer, said groups having the following formula



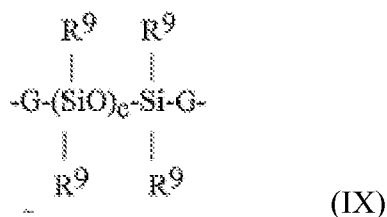
in which:

15 the radicals R represent, independently, a methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, isobutyl group, preferably a methyl or ethyl group,

R^1 is a methyl or ethyl group,

x is equal to 0 or 1, preferably x is equal to 0 and

20 Z is selected from: the divalent hydrocarbon groups that do not have an ethylenic unsaturation and have from 1 to 18 carbon atoms, preferably from 2 to 18 carbon atoms (alkylene groups), the combinations of divalent hydrocarbon radicals and siloxane segments of the following formula (IX):



25 R^9 being as described above, G is a divalent hydrocarbon radical without an ethylenic unsaturation and having from 1 to 18 carbon atoms, preferably from 2 to 18 carbon atoms and c is an integer in the range from 1 to 6.

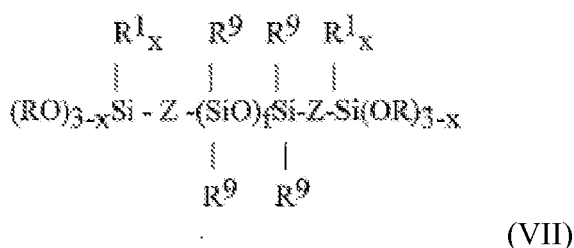
Z and G can notably be selected from the alkylene groups such as methylene, ethylene, propylene, butylene, pentylene, hexylene, the arylene groups such as phenylene.

Preferably, Z is an alkylene group, and more preferably ethylene.

These polymers can have on average at least 1.2 trialkoxysilane end groups or terminal chains per molecule, and preferably on average at least 1.5 trialkoxysilane end groups per molecule. These polymers that can have at least 1.2 trialkoxysilane end groups per molecule, some can include other types of end groups such as end groups of formula CH₂=CH-SiR⁹₂- or of formula R⁶₃-Si-, in which R⁹ is as defined previously and each group R⁶ is selected independently from the R⁹ or vinyl groups. As examples of said end groups, we may mention the trimethoxysilane, triethoxysilane, vinyl dimethoxysilane and vinylmethoxyphenylsilane groups.

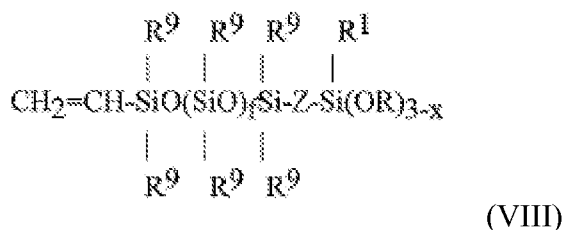
Such polymers are notably described in documents US 3 175 993, US 4 772 675, US 4 871 827, US 4 888 380, US 4 898 910, US 4 906 719 and US 4 962 174, the contents of which are incorporated by reference in the present application.

We may mention, as compound X and/or Y, in particular the polyorganosiloxanes selected from the polymers of formula:



in which R, R¹, R⁹, Z, x and f are as described above.

Compounds X and/or Y can also include a mixture of polymers of formula (VII) above with polymers of the following formula (VIII):



in which R, R¹, R⁹, Z, x, and f are as described above.

When the polyorganosiloxane compound X and/or Y with alkoxy silane group(s) includes said mixture, the various polyorganosiloxanes are present at contents such that the organosilyl terminal chains represent less than 40%, preferably less than 25% in number of terminal chains.

Polyorganosiloxane compounds X and/or Y that are particularly preferred are those of formula (VII) described above. Such compounds X and/or Y are described for example in document WO 01/96450.

As stated above, compounds X and Y can be identical or different.

5 In particular, compounds X and Y can represent a mixture of polydimethylsiloxanes with methoxysilane groups.

According to a variant, one of the 2 reacting compounds X or Y is of silicone character and the other is of organic character. For example, compound X is selected from organic oligomers or polymers or hybrid organic/silicone oligomers or polymers, said
10 polymers or oligomers comprising at least two alkoxy silane groups, and Y is selected from silicone compounds such as the polyorganosiloxanes described above. In particular, the organic oligomers or polymers are selected from the vinylic, (meth)acrylic oligomers or polymers, polyesters, polyamides, polyurethanes and/or polyureas, polyethers, polyolefins, perfluoropolyethers, dendrimers and hyperbranched organic polymers, and mixtures
15 thereof.

According to one embodiment, compound X of organic character or of hybrid organic/silicone character bears at least one polar group, as described above, capable of forming at least one hydrogen bond with the keratinous substance.

The organic polymers of vinylic or (meth)acrylic character, bearing
20 alkoxy silane side groups, can in particular be obtained by copolymerization of at least one vinylic or (meth)acrylic organic monomer with a (meth)acryloxypropyltrimethoxysilane, a vinyltrimethoxysilane, a vinyltriethoxysilane, an allyltrimethoxysilane etc.

We may mention for example the (meth)acrylic polymers described in the document of KUSABE, M, *Pittura e Vernici* – European Coating; 12-B, pages 43-49, 2005, and notably the polyacrylates with alkoxy silane groups with the designation MAX
25 from Kaneka or those described in the work by PROBSTER, M, *Adhesion-Kleben & Dichten*, 2004, 481 (1-2), pages 12-14.

The organic polymers resulting from a polycondensation or a polyaddition, such as polyesters, polyamides, polyurethanes and/or polyureas, polyethers, and bearing
30 alkoxy silane side and/or end groups, can result for example from reaction of an oligomeric prepolymer as described above with one of the following silane reaction partners bearing at least one alkoxy silane group: aminopropyltrimethoxysilane, aminopropyltriethoxysilane,

aminoethyl aminopropyl trimethoxysilane, glycidoxypropyltrimethoxysilane, glycidoxypropyltriethoxysilane, epoxyhexylethyltrimethoxysilane, mercaptopropyltrimethoxysilane.

5 Examples of polyethers and polyisobutylenes with alkoxy silane groups are described in the work by KUSABE, M., Pitture e Verniei – European Coating; 12-B, pages 43-49, 2005. As examples of polyurethanes with alkoxy silane end groups, we may mention those described in the document PROBSTER, M., Adhesion-Kleben & Dichten, 2004, 481 (1-2), pages 12-14 or alternatively those described in the document LANDON, S., Pitture e Verniei Vol. 73, No. 11, pages 18-24, 1997 or in the document HUANG, Mowu, Pitture e
10 Verniei Vol. 5, 2000, pages 61-67, and we may notably mention the polyurethanes with alkoxy silane groups from OSI-WITCO-GE.

As polyorganosiloxane compounds X and/or Y, we may mention the resins of type MQ or MT which themselves bear alkoxy silane and/or silanol end groups, for example the poly(isobutylsilsesquioxane) resins functionalized with silanol groups offered
15 under reference SST-S7C41 (three Si-OH groups) by the company Gelest.

2a - Additional reactive compound

According to one embodiment, compound X and/or Y can additionally be combined with an additional reactive compound comprising at least two alkoxy silane or
20 silanol groups.

We may mention for example:

- one or more organic or mineral particles with alkoxy silane and/or silanol groups on their surface, for example fillers surface-treated with said groups.

25

2b - Catalyst

The condensation reaction can take place in the presence of a metal-based catalyst which can be present with one or other of the compounds X or Y or can be present on its own. For example, said catalyst can be present in the composition in an encapsulated
30 form if the two compounds X and Y, which it is to cause to interact, are present in this same composition in an unencapsulated form or conversely it can be present there in an unencapsulated form if at least one of compounds X and Y is present in the composition in

an encapsulated form. The catalyst for use in this type of reaction is preferably a titanium-based catalyst.

We may notably mention the catalysts based on tetraalkoxytitanium of formula:



in which R² is selected from the tertiary alkyl radicals such as tert-butyl, tert-amyl and 2,4-dimethyl-3-pentyl; R³ represents an alkyl radical having from 1 to 6 carbon atoms, preferably a methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, hexyl group and y is a number in the range from 3 to 4, preferably from 3.4 to 4.

10 The catalyst can be present at a content ranging from 0.0001 to 20 wt.% relative to the total weight of the composition containing it.

2c - Diluent

The compositions that can be used, comprising X and/or Y, can additionally include a volatile silicone oil (or diluent) for lowering the viscosity of the composition. Said oil can be selected from the short-chain linear silicones such as hexamethyldisiloxane, octamethyltrisiloxane, cyclic silicones such as octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane and mixtures thereof.

20 This silicone oil can represent from 5 to 95 wt.%, preferably from 10 to 80 wt.% relative to the weight of each composition.

As an example of a combination of compounds X and Y bearing alkoxy silane groups and reacting by condensation, we may mention the combination of the following mixtures A' and B' produced by the company Dow Corning:

25

Mixture A':

Ingredient (INCI name)	CAS No.	Contents (%)	Function
Bis-Trimethoxysiloxyethyl Tetramethyldisiloxyethyl Dimethicone (1)	PMN87176	25-45	Polymer
Silica Silylate	68909-20-6	5-20	Filler
Disiloxane	107-46-0	30-70	Solvent

Mixture B':

Ingredient (INCI name)	CAS No.	<u>Contents (%)</u>	Function
Disiloxane	107-46-0	80-99	Solvent
Tetra T Butyl Titanate	-	1-20	Catalyst

5 It should be noted that compounds X and Y, identical, are combined in mixture A' (cf. (1))

3/ Crosslinking in the presence of peroxide:

10 According to one embodiment, the invention relates to a cosmetic kit for colouring the hair and/or care and/or make-up of keratinous substance(s) comprising at least two different compositions packaged separately, the kit comprising at least some hydrophobic solid particles, one or more compounds X, one or more compounds Y and at least one peroxide, at least one of the compounds X or Y being a silicone compound, provided that the compounds X, Y and the peroxide are not present simultaneously in the same composition, said compounds X and Y being capable of reacting with one another by
15 a crosslinking reaction in the presence of a peroxide when they are brought into contact with one another, and the hydrophobic solid particles are present in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.

20 This reaction is preferably effected by heating to a temperature greater than or equal to 50°C, preferably greater than or equal to 80°C, and up to 120°C.

 Compounds X and Y, which may be identical or different, have in this case at least two -CH₃ side groups and/or at least two side chains bearing a -CH₃ group.

25 Compounds X and Y are preferably silicone compounds and can be selected for example from the non-volatile linear polydimethylsiloxanes of high molecular weight, having a degree of polymerization above 6 and with at least two -CH₃ side groups attached to the silicon atom and/or at least two side chains bearing a -CH₃ group. We may mention for example the polymers described in the Catalogue "Reactive Silicones" of the company Gelest Inc., Edition 2004, page 6, and notably the copolymers (also called gums) of vinylmethylsiloxane-dimethylsiloxane of molecular weight in the range from 500 000 to

900 000 and notably with viscosity above 2 000 000 cSt.

As peroxides that can be used in the invention, we may mention benzoyl peroxide, 2,4-dichlorobenzoyl peroxide and mixtures thereof.

According to one embodiment, the hydrosilylation reaction in the presence of a catalyst, or the condensation reaction, or alternatively the crosslinking reaction in the presence of a peroxide, between compounds X and Y is accelerated by supply of heat, for example by raising the temperature of the system between 25°C and 180°C.

In general, regardless of the type of reaction by which compounds X and Y react with one another, the molar percentage of X relative to the total of compounds X and Y, i.e. the ratio $X/(X+Y) \times 100$, can vary from 5 to 95%, preferably from 10 to 90%, and more preferably from 20 to 80%.

Similarly, the molar percentage of Y relative to the total of compounds X and Y, i.e. the ratio $Y/(X+Y) \times 100$, can vary from 5 to 95%, preferably from 10 to 90%, and more preferably from 20 to 80%.

Compound X can have a weight-average molecular weight (Mw) in the range from 150 to 1 000 000, preferably from 200 to 800 000, more preferably from 200 to 250 000.

Compound Y can have a weight-average molecular weight (Mw) in the range from 200 to 1 000 000, preferably from 300 to 800 000, more preferably from 500 to 250 000.

Compound X can represent from 0.1 to 95 wt.% relative to the total weight of the composition containing it, preferably from 1 to 90%, and more preferably from 5 to 80%.

Compound Y can represent from 0.1 to 95 wt.% relative to the total weight of the composition containing it, preferably from 1 to 90%, and more preferably from 5 to 80%.

The ratio of compound X to compound Y can be varied so as to adjust the reaction rate and therefore the rate of formation of the film or alternatively so as to adapt the properties of the film formed (for example its adhesive properties) according to the intended application.

In particular, compounds X and Y can be present at a molar ratio X/Y in the range from 0.05 to 20 and preferably from 0.1 to 10.

Compounds X and Y can advantageously be combined with at least one filler. Thus, the kit according to the invention can for example include, in at least one of the compositions, a filler selected from silica or surface-treated silica.

As pointed out previously, according to one embodiment of the invention,
5 compounds X and Y can be used in the form of a single composition which then contains at least one of them or, if applicable, the catalyst or the peroxide if necessary for their interaction, in an encapsulated form.

Within the scope of the present invention, consideration is given more particularly to the encapsulated forms of the core/shell type, also called microcapsules or
10 nanocapsules, in which the shell is of polymeric character and the core contains compound X, compound Y, one of its compounds X and Y possibly being encapsulated with the catalyst or the peroxide if necessary for the interaction of the two compounds. In the case when this catalyst is not encapsulated with one or other of the compounds X or Y, it is present in the cosmetic composition containing the encapsulated forms.

15 Numerous techniques are currently available for making microcapsules or nanocapsules of this type.

However, according to a preferred embodiment, the encapsulated forms considered according to the invention are nanocapsules and are obtained by a technique called solvent nanoprecipitation, notably described in documents EP 274 961 and
20 EP 1 552 820.

More particularly, the shell of the nanocapsules of compound X or Y, employed according to the invention, is of polymeric character, not crosslinked, not water-soluble and not soluble in the capsule core.

25 In general, all the polymers, of natural or synthetic origin, soluble in a solvent that is not miscible with water, and notably those having a melting point below the boiling point of water at atmospheric pressure (100°C), may be suitable.

These polymers can be biodegradable, for example polyesters, or non-biodegradable.

30 By way of illustration of polymers that are suitable for the invention, we may notably mention:

- C₂-C₁₂ alkyl cyanoacrylate polymers,

- polymers formed by poly-L-lactides, poly-DL-lactides, polyglycolides and the corresponding copolymers,
- polycaprolactones,
- polymers of 3-hydroxybutyric acid,
- 5 - copolymers of vinyl chloride and vinyl acetate,
- copolymers of methacrylic acid and methacrylic ester, notably of methacrylic acid and of methacrylate,
- polyvinyl acetophthalate,
- cellulose acetophthalate,
- 10 - polyvinylpyrrolidone-vinyl acetate copolymer,
- polyethylenevinyl acetates,
- polyacrylonitriles,
- polyacrylamides,
- polyethylene glycols,
- 15 - poly-(C₁ to C₄ hydroxyalkyl methacrylate)
- esters of cellulose and C₁-C₄ carboxylic acid,
- polystyrene and copolymers of styrene and maleic anhydride, copolymers of styrene and acrylic acid, styrene ethylene/butylene-styrene block terpolymers, styrene-ethylene/propylene-styrene block terpolymers,
- 20 - styrene alkyl-alcohol oligomers,
- terpolymers of ethylene, vinyl acetate and maleic anhydride,
- polyamides,
- polyethylenes,
- polypropylenes,
- 25 - organopolysiloxanes including polydimethylsiloxanes,
- poly(alkylene adipate),
- polyol polyesters,
- polysilsesquioxane silicone polymers,
- dendritic polyesters with a hydroxyl terminal function,
- 30 - polymers that are water-dispersible but are nevertheless soluble in solvents that are not miscible with water, for example: polyesters, poly(ester amides), polyurethanes and vinyl copolymers bearing carboxylic and/or sulphonic acid functions and in particular

those described in document FR 2 787 729,

- block copolymers insoluble in water at room temperature and solid at room temperature, having at least one block of one of the aforementioned polymers, and
- mixtures thereof.

5

These polymers or copolymers can have a weight-average molecular weight between 1000 and 500 000 and in particular between 1500 and 100 000.

The following are quite particularly suitable for the invention: poly(alkylene adipate), organopolysiloxanes, polycaprolactones, cellulose acetophthalate, cellulose
10 acetobutyrate, cellulose esters, polystyrene and its derivatives, and notably polycaprolactones.

Of course, a person skilled in the art is able, on the basis of his knowledge, to adjust the molecular weight of the polymer selected with respect to its concentration in the solvent so as have a mixture viscosity compatible with satisfactory emulsification.

15

With regard to the lipophilic core, it can contain at least one oil, in addition to compound X or compound Y. Said oil can be selected from the oils described hereunder for the oily phase. The oil is preferably a silicone oil.

According to a variant of the invention, the encapsulated forms of compound X or compound Y can be coated with a lamellar phase.

20

Regarding the operating procedure for production of nanocapsules suitable for the invention, a person skilled in the art can notably refer to the teaching in document EP 1 552 820 cited previously. The choice of the necessary surfactants as well as the carrying out of the method require the knowledge of a person skilled in the art.

25

PHYSIOLOGICALLY ACCEPTABLE MEDIUM

The compositions according to the invention include a physiologically acceptable medium, i.e. a non-toxic medium that can be applied on keratinous substances of human beings and is of a pleasant appearance, odour and feel.

30

The compositions according to the invention advantageously contain at least one liquid fatty phase.

The compositions according to the invention can advantageously be in the form of anhydrous compositions, i.e. containing less than 5 wt.%, in particular less than 3 wt.%, in particular less than 2 wt.%, and more particularly less than 1 wt.% of water relative to

the total weight of the composition. They can then notably be in the form of oily gels, oily liquids, soft pastes or sticks, compacts or moulded products, loose powders, or in the form of vesicular dispersion containing ionic and/or non-ionic liquids.

These compositions are prepared according to the usual methods.

5 The compositions of this type can have the form of a product for care or for make-up of the face and/or of the body and/or of hair fibres and in particular the hair, and can be packaged for example in the form of cream in a pot or of fluid in a tube or in a pump bottle.

10 As examples of oils for use in the compositions according to the invention, we may mention:

- hydrocarbon oils of animal origin, such as perhydrosqualene;
- hydrocarbon oils of vegetable origin, such as liquid triglycerides of fatty acids having from 4 to 10 carbon atoms such as triglycerides of heptanoic or octanoic acids or alternatively, for example sunflower oil, corn oil, soya oil, cucurbit oil, grapeseed oil, 15 sesame oil, hazelnut oil, apricot oil, macadamia oil, arara oil, castor oil, avocado oil, triglycerides of caprylic/capric acids such as those sold by the company Stearineries Dubois or those sold under the designations Miglyol 810, 812 and 818 by the company Dynamit Nobel, jojoba oil, shea butter oil;
- esters and ethers, notably of fatty acids, such as the oils of formulae 20 R_1COOR_2 and R_1OR_2 in which R_1 represents the residue of a fatty acid having from 8 to 29 carbon atoms, and R_2 represents a linear or branched hydrocarbon chain, containing from 3 to 30 carbon atoms, for example purcelline oil, isononyl isononanoate, isopropyl myristate, ethyl-2-hexyl palmitate, octyl-2-dodecyl stearate, octyl-2-dodecyl erucate, isostearyl isostearate; hydroxylated esters such as isostearyl lactate, octylhydroxystearate, 25 octyldodecyl hydroxystearate, diisostearyl malate, triisocetyl citrate, heptanoates, octanoates, decanoates of fatty alcohols; polyol esters, such as propylene glycol dioctanoate, neopentylglycol diheptanoate and diethylene glycol diisononanoate; and esters of pentaerythritol such as pentaerythrityl tetraisostearate;
- linear or branched hydrocarbons, of mineral or synthetic origin, such as 30 volatile or non-volatile paraffin oils, and derivatives thereof, isohexadecane, isododecane, petroleum jelly, polydecenes, hydrogenated polyisobutene such as Parleam[®] oil;
- natural or synthetic essential oils such as, for example, eucalyptus oil,

hybrid lavender oil, lavender oil, vetiver oil, litsea cubeba oil, lemon oil, sandalwood oil, rosemary oil, chamomile oil, savory oil, nutmeg oil, cinnamon oil, hyssop oil, caraway oil, orange oil, geraniol, cade oil and bergamot oil;

- fatty alcohols having from 8 to 26 carbon atoms, such as cetyl alcohol, stearyl alcohol and their mixture (cetylstearyl alcohol), octyl dodecanol, 2-butyloctanol, 2-hexyldecanol, 2-undecylpentadecanol, oleic alcohol or linoleic alcohol;

- fluorinated oils, partially hydrocarbon-containing and/or silicone-containing, such as those described in document JP-A-2-295912;

- silicone oils such as volatile or non-volatile polymethylsiloxanes (PDMS) with linear or cyclic silicone chain, liquid or pasty at room temperature, notably cyclopolydimethylsiloxanes (cyclomethicones) such as cyclohexasiloxane and cyclopentasiloxane; polydimethylsiloxanes bearing alkyl, alkoxy or phenyl groups, pendant or at the end of the silicone chain, groups having from 2 to 24 carbon atoms; phenylated silicones such as phenyltrimethicones, phenyldimethicones, phenyltrimethylsiloxydiphenyl-siloxanes, diphenyl-dimethicones, diphenylmethyldiphenyl trisiloxanes, 2-phenylethyltrimethyl-siloxysilicates, and polymethylphenylsiloxanes;

- mixtures thereof.

In the list of oils given above, "hydrocarbon oil" means any oil comprising mainly carbon atoms and hydrogen atoms, and optionally ester groups, ether groups, fluorine, carboxylic acid and/or alcohol.

The other fats that can be present in the oily phase are for example fatty acids having from 8 to 30 carbon atoms, such as stearic acid, lauric acid, palmitic acid and oleic acid; waxes such as lanolin, beeswax, carnauba wax or candelilla wax, paraffin wax, lignite wax or microcrystalline waxes, ceresine or ozokerite, synthetic waxes such as polyethylene waxes, Fischer-Tropsch waxes; gums such as silicone gums (dimethiconol); silicone resins such as trifluoromethyl-C1-4-alkyldimethicone and trifluoropropyldimethicone; and silicone elastomers such as the products marketed under the names "KSG" by the company Shin-Etsu, under the names "Trefil", "BY29" or "EPSX" by the company Dow Corning or under the names "Gransil" by the company Grant Industries.

These fats can be selected variously by a person skilled in the art in order to prepare a composition having desired properties, for example of consistency or texture.

The compositions according to the invention can include in particular a volatile oil. By this expression, we mean oils having, at a temperature of 20°C, a vapour pressure above 1 mbar. Vapour pressure is defined as the pressure at which a liquid and its vapour are in equilibrium at a given temperature. As volatile oils we may mention, among others,
5 the cyclic or linear silicones containing from 2 to 6 silicon atoms, such as cyclohexasiloxane, dodecamethylpentasiloxane, decamethyltetrasiloxane, butyltrisiloxane and ethyltrisiloxane. It is also possible to use branched hydrocarbons such as for example isododecane as well as volatile perfluoroalkanes such as dodecafluoropentane and tetradecafluorohexane, sold under the names "PF 5050[®]" and "PF 5060[®]" by the 3M
10 Company and the perfluoromorpholine derivatives, such as 4-trifluoromethyl perfluoromorpholine sold under the name "PF 5052[®]" by the 3M Company.

The amount of oily phase present in the compositions according to the invention can range for example from 0.01 to 98 wt.%, for example from 0.01 to 95 wt.%, and preferably from 0.1 to 50 wt.% relative to the total weight of the composition.

15

The compositions according to the invention can in addition include at least one colorant, selected for example from pigments, nacles, dyes, materials with special effects and mixtures thereof.

These colorants can be present at a content ranging from 0.01 to 50 wt.%,
20 preferably from 0.01 to 30 wt.% relative to the total weight of the composition.

The compositions according to the invention can include a filler other than the hydrophobic solid particles considered according to the invention, notably at a content ranging from 0.01 to 50 wt.%, relative to the total weight of the composition, preferably from 0.01 to 30 wt.%. Said fillers can be mineral or organic of any shape, as platelets,
25 spherical or oblong, regardless of the crystallographic form (for example plate, cubic, hexagonal, orthorhombic, etc.). We may mention talc, mica, kaolin, lauroyl-lysine, starch, boron nitride, barium sulphate, precipitated calcium carbonate, magnesium carbonate and hydrocarbonate, hydroxyapatite, glass or ceramic microcapsules, metal soaps derived from organic carboxylic acids having from 8 to 22 carbon atoms, preferably from 12 to 18
30 carbon atoms, for example zinc stearate, magnesium stearate or lithium stearate, zinc laurate, magnesium myristate.

The composition according to the invention can in addition contain various

additives commonly used in the field of cosmetics, such as sequestering agents; perfumes; and thickening and gelling agents. The amounts of these various additives and their type will be selected so that they do not adversely affect the hydrophobic properties of the composition.

5 As lipophilic gelling agents, we may mention for example modified clays such as modified magnesium silicate (bentone gel VS38[®] from RHEOX), hectorite modified with distearyl dimethyl ammonium chloride (CTFA name: disteardimonium hectorite) marketed under the designation bentone 38 CE[®] by the company RHEOX.

10 For application in particular for the care or for make-up of greasy skin, the compositions according to the invention can include at least one active selected from: desquamating agents, anti-seborrhoeic agents, antimicrobial agents, and soothing agents.

15 As a variant, for application to the care or colouring of hair fibres, the composition according to the invention can include at least one active selected from reducing agents, oxidizing agents, fats, other silicones, thickeners, softening agents, anti-foaming agents, hydrating agents, emollients, alkalizing agents, elastomers, plasticizers, sun filters, clays, colloidal minerals, perfumes, peptizing agents, preservatives, anionic, cationic, amphoteric, zwitterionic or non-ionic surfactants, ionic, anionic, cationic or amphoteric polymers, proteins, vitamins, etc.

20 The compositions according to the invention can be independently in the form of suspension, dispersion, solution, gel, emulsion, notably oil-in-water emulsion (O/W), wax-in-water or water-in-oil (W/O), or multiple emulsion (W/O/W or polyol/O/W or O/W/O), in the form of cream, paste, mousse, dispersion of vesicles notably of ionic or non-ionic lipids, biphasic or multiphase lotion, powder, paste, notably soft paste.

25 Advantageously, they can be used for make-up of the skin, of the lips, of the eyelashes and/or of the nails, depending on the nature of the ingredients used.

 In particular, the compositions according to the invention can independently be in the form of a foundation, a lipstick or lip rouge paste, anti-eye-circle or contour product, eye-liner, eye shadow, product for make-up of the body or alternatively a skin colouring product.

30 According to one embodiment, the compositions are lipstick compositions.

 According to another embodiment, the compositions are compositions for coating the eyelashes or the eyebrows and more particularly mascaras.

According to another embodiment, the compositions are compositions for coating the skin of the body or of the face and more particularly compositions for make-up of the skin of the body or of the face, for example foundations or compositions for make-up of the body.

5 They can also be hair-care compositions.

The compositions according to the invention can then be in various forms, such as lotions, sprays, mousses, creams, pastes, milks for the hair, and can be applied in the form of shampoo or after-shampoo.

In the case of sprays, the composition of the invention can contain a propellant.
10 The propellant comprises the compressed or liquefied gases usually employed for the preparation of aerosol compositions. Air, carbon dioxide, compressed nitrogen or alternatively a soluble gas such as dimethyl ether, hydrocarbons – halogenated (fluorinated in particular) or not – and mixtures thereof, will preferably be used.

A person skilled in the art will be able to select the appropriate galenical form,
15 as well as its method of preparation, on the basis of his general knowledge, taking into account, on the one hand, the nature of the constituents used, notably their solubility in the carrier, and, on the other hand, the application envisaged for each composition.

The invention is illustrated in more detail by the examples described below.
Unless stated otherwise, the quantities shown are expressed as percentage by weight.

20

EXAMPLES

In the examples of compositions 1 to 4 described hereunder, the combination of the following mixtures A and B produced by the company Dow Corning is used as the combination of compounds X and Y:

MIXTURE A:

Ingredient (INCI name)	CAS No.	<u>Contents (%)</u>	Function
Dimethyl Siloxane, Dimethylvinylsiloxo- terminal	68083-19- 2	55-95	Polymer
Silica Silylate	68909-20- 6	10-40	Filler
1,3-Diethenyl-1,1,3,3- Tetramethyldisiloxane complexes	68478-92- 2	Trace	Catalyst
Tetramethyldivinylsiloxane	2627-95-4	0.1-1	Polymer

MIXTURE B:

Ingredient (INCI name)	CAS No.	<u>Contents (%)</u>	Function
Dimethyl Siloxane, Dimethylvinylsiloxo- terminal	68083-19-2	55-95	Polymer
Silica Silylate	68909-20-6	10-40	Filler
Dimethyl, Methylhydrogen Siloxane, trimethylsiloxo- terminal	68037-59-2	1-10	Polymer

- 5 In the example of composition 5 described below, a combination of the following mixtures A' and B' prepared by the company Dow Corning is used as the combination of compounds X and Y:

Mixture A':

Ingredient (INCI name)	CAS No.	<u>Contents (%)</u>	Function
Bis- Trimethoxysiloxyethyl Tetramethyldisiloxyethyl Dimethicone (1)	PMN87176	25-45	Polymer
Silica Silylate	68909-20-6	5-20	Filler
Disiloxane	107-46-0	30-70	Solvent

Mixture B':

Ingredient (INCI name)	CAS No.	<u>Contents (%)</u>	Function
Disiloxane	107-46-0	80-99	Solvent
Tetra T Butyl Titanate	-	1-20	Catalyst

It should be noted that identical compounds X and Y are combined in mixture A' (cf. (1)).

5

Example 1: Anhydrous foundation**First composition****Phase A:**

- Mixture A 1.00%
- 10 - Hydrophobic fumed silica (AEROSIL[®] R 972) 2.50%
- Cyclopentasiloxane 39.00%

Phase B:

- Red iron oxide coated with isopropyl triisostearoyl titanate sold under the reference BRO-I 2 by the company Kobo 0.57%
- 15 - Yellow iron oxide coated with isopropyl triisostearoyl titanate sold under the reference BYO-I 2 by the company Kobo 1.19%
- Black iron oxide coated with isopropyl triisostearoyl titanate sold under the reference BBO-I 2 by the company Kobo 0.23%
- 20 - Titanium dioxide coated with isopropyl triisostearoyl titanate sold under the reference BTD-401 by the company Kobo 8.01%
- Dimethicone (5cSt) 5.00%

Procedure

25 The constituents of phase A are weighed and stirred with a magnetic bar.

Phase B is prepared by grinding the pigments 3 times in a three-roll grinder.

The first composition is then obtained by combining phases A and B and mixing them using a magnetic stirrer.

Second composition

- | | |
|---|--------|
| - Mixture B | 1.00% |
| - Hydrophobic fumed silica (AEROSIL [®] R 972) | 2.50% |
| - Cyclopentasiloxane | 39.00% |

5

Procedure

The constituents of the second composition are weighed and stirred with a magnetic bar.

The foundation is obtained by mixing, in an extemporaneous way, manually or using a magnetic stirrer, the first and second compositions described above just before application on the support.

10

Example 2: Anhydrous foundation**First composition**

15

Phase A:

- | | |
|---|--------|
| - Mixture A | 1.00% |
| - Hydrophobic fumed silica (AEROSIL [®] R 972) | 2.50% |
| - Cyclopentasiloxane | 39.00% |

20

Phase B:

- | | |
|--|-------|
| - Red iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8075-10 by the company Miyoshi Kasei | 0.57% |
| - Yellow iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8073-10 by the company Miyoshi Kasei | 1.19% |
| - Black iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-134-10 by the company Miyoshi Kasei | 0.23% |
| - Titanium dioxide coated with aluminium stearoyl glutamate sold under the reference NAI C47-051-10 by the company Miyoshi Kasei | 8.01% |
| - Dimethicone (5cSt) | 5.00% |

25

30

Procedure

The constituents of phase A are weighed and stirred with a magnetic bar.

Phase B is prepared by grinding the pigments 3 times in a three-roll grinder.

The first composition is obtained by combining phases A and B and stirring them using a magnetic stirrer.

5 **Second composition**

- | | |
|--|--------|
| - Mixture B | 1.00% |
| - Hydrophobic fumed silica (AEROSIL R 972) | 2.50% |
| - Cyclopentasiloxane | 39.00% |

10 **Procedure**

The constituents of the second composition are weighed and stirred with a magnetic bar.

The foundation is obtained by mixing, in an extemporaneous way, manually or using a magnetic stirrer, the first and second compositions described above just before application on the support.

Example 3: Anhydrous foundation

First composition

Phase A:

- | | |
|--------------------------|--------|
| 20 - Mixture A | 1.00% |
| - Cyclopentasiloxane | 39.00% |

Phase B:

- | | |
|---|-------|
| 25 - Silica microspheres coated with PDMS (SA-SB-300 with size of the primary particles from 1 to 16 µm) | 5.00% |
| - Red iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8075-10 by the company Miyoshi Kasei | 0.57% |
| - Yellow iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8073-10 by the company Miyoshi Kasei | 1.19% |
| 30 - Black iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-134-10 by the company Miyoshi Kasei | 0.23% |

- Titanium dioxide coated with aluminium stearoyl glutamate sold under the reference NAI C47-051-10 by the company Miyoshi Kasei 8.01%
- Dimethicone (5cSt) 5.00%

5 Procedure

The constituents of phase A are weighed and stirred with a magnetic bar.

Phase B is prepared by grinding the pigments and the silica 3 times in a three-roll grinder.

10 The first composition is obtained by combining phases A and B and stirring them using a magnetic stirrer.

Second composition

- Mixture B 1.00%
- Cyclopentasiloxane 39.00%

15

Procedure

The constituents of the second composition are weighed and stirred with a magnetic bar.

20 The foundation is obtained by mixing, in an extemporaneous way, manually or using a magnetic stirrer, the first and second compositions described above just before application on the support.

Example 4: Anhydrous foundation

25

First composition

Phase A:

- Mixture A 1.00%
- Cyclopentasiloxane 39.00%

30

Phase B:

- Zinc nano-oxide (Z-Cote with size of the primary particles from 50 to 80 nm) 5.00%

- 5
- Red iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8075-10 by the company Miyoshi Kasei 0.57%
 - Yellow iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8073-10 by the company Miyoshi Kasei 1.19%
 - Black iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-134-10 by the company Miyoshi Kasei 0.23%
 - Titanium dioxide coated with aluminium stearoyl glutamate sold under the reference NAI C47-051-10 by the company Miyoshi Kasei 8.01%
 - Dimethicone (5cSt) 5.00%

10

Procedure

The constituents of phase A are weighed and stirred with a magnetic bar.

Phase B is prepared by grinding the pigments and the zinc nano-oxide, 3 times in a three-roll grinder.

- 15 The first composition is then obtained by mixing phases A and B and stirring them using a magnetic stirrer.

Second composition

- 20
- Mixture B 1.00%
 - Cyclopentasiloxane 39.00%

Procedure

The constituents of the second composition are weighed and stirred with a magnetic bar.

- 25 The foundation is obtained by mixing, in an extemporaneous way, manually or using a magnetic stirrer, the first and second compositions described above just before application on the support.

Example 5: Anhydrous foundation**First composition**

- Cyclopentasiloxane 10 g
- Red iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8075-10 by the company Miyoshi Kasei 0.8 g
- Yellow iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8073-10 by the company Miyoshi Kasei 3.1 g
- Black iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-134-10 by the company Miyoshi Kasei 0.4 g
- Titanium dioxide coated with aluminium stearoyl glutamate sold under the reference NAI C47-051-10 by the company Miyoshi Kasei 15.7 g
- Modified hydrophobic silica particles (Tegotop105[®]) 10 g

Procedure

- 15 The first composition is prepared by grinding the pigments in the cyclopentasiloxane 3 times in a three-roll grinder, then adding the modified hydrophobic silica particles and mixing using a magnetic stirrer.

Second composition

- 20 - Crosslinked polysiloxane sold under the name ELASTOSIL RT 563 RTV-2 RUBBER SILICON[®] by the company Wacker 10.5 g

Third composition

- 25 - Tetraethoxysilane (and) dibutyl bis ((neodecanyloxy)stannane) sold under the name DURCISSEUR T 40[®] by the company Wacker 1.5 g

Procedure

- 30 The foundation is obtained by mixing, in an extemporaneous way, manually or using a magnetic stirrer, 3 g of the first composition with the second and third compositions described above, just before application on the support.

Example 6: Anhydrous foundation**First composition**

Phase A:

- Cyclopentasiloxane 10 g
- 5 - Red iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8075-10 by the company Miyoshi Kasei 0.8 g
- Yellow iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8073-10 by the company Miyoshi Kasei 3.1 g
- 10 - Black iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-134-10 by the company Miyoshi Kasei 0.4 g
- Titanium dioxide coated with aluminium stearoyl glutamate sold under the reference NAI C47-051-10 by the company Miyoshi Kasei 15.7 g
- Modified hydrophobic silica particles (Tegotop105[®]) 10 g

15 Phase B:

- Bis ((3-methyldimethoxysilyl)propyl) polypropylene oxide sold under the name SIB 1660.0[®] by the company Gelest 10.5 g
- Tetraethoxysilane (and) dibutyl bis ((neodecanyloxy)stannane) sold under the name DURCISSEUR T 40[®] by the company Wacker 1.5 g

20

Procedure

Phase A is prepared as described for the first composition in Example 5.

The first composition is then obtained by mixing 3 g of phase A and phase B, and stirring them using a magnetic stirrer.

25

Second composition

Phase A:

- Cyclopentasiloxane 10 g
- 30 - Red iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8075-10 by the company Miyoshi Kasei 0.8 g
- Yellow iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-8073-10 by the company Miyoshi Kasei 3.1 g

- 5
- Black iron oxide coated with aluminium stearoyl glutamate sold under the reference NAI C33-134-10 by the company Miyoshi Kasei 0.4 g
 - Titanium dioxide coated with aluminium stearoyl glutamate sold under the reference NAI C47-051-10 by the company Miyoshi Kasei 15.7 g
 - Modified hydrophobic silica particles (Tegotop105[®]) 10 g

Phase B:

- Crosslinked polysiloxane sold under the name ELASTOSIL RT 563 RTV-2 RUBBER SILICON[®] by the company Wacker 12 g

10

Procedure

Phase A is prepared as described for the first composition in Example 5.

The second composition is then obtained by mixing 3 g of phase A and phase B, and stirring them using a magnetic stirrer.

15

The foundation is obtained by mixing, in an extemporaneous way, manually or using a magnetic stirrer, 1 g of the first composition and 1 g of the second composition, just before application on the support.

Example 7: Hair-care composition

20

First composition

- Modified hydrophobic silica particles (Tegotop 105[®]) 6 wt.%
- Cyclopentasiloxane qsf 100%

Second composition

25

- Mixture B' 0.67 wt.%
- Cyclopentasiloxane qsf 100%

Third composition

- Mixture A' 6.7 wt.%
- Cyclopentasiloxane qsf 100%

30

Method of application to obtain a hair strand on wet natural hair:

0.25 g of the first composition and 0.25 g of the second composition are mixed,

in an extemporaneous way. Then the mixture of the first and second compositions is applied on a lock of 2.5 g of wet natural hair, and it is combed.

Then 0.5 g of the third composition is applied, combing again.

Finally the hair is gathered to form a hair strand, and it is dried.

5 The hair strand obtained according to this method is stiff and cohesive.

It is also impermeable: thus, when it is passed under water, it comes out less wet than an untreated lock of hair.

Method of application to obtain a slender hair strand on wet natural hair:

10 0.25 g of the second composition and 0.25 g of the third composition are mixed in an extemporaneous way. Then the mixture of the second and third compositions is applied on a lock of 2.5 g of wet natural hair, and it is combed.

After waiting a few minutes, 0.5 g of the first composition is then applied, and it is combed.

15 Finally it is dried under a hair-dryer or by blow-drying.

The hair strand obtained according to this method is slender.

It is also impermeable: thus, when it is passed under water, it comes out less wet than an untreated lock of hair.

CLAIMS

1. Cosmetic kit for colouring the hair and/or care and/or make-up of keratinous substance(s) comprising at least two different compositions packaged separately, the kit comprising at least some hydrophobic solid particles, one or more compounds X, one or more compounds Y, and at least one catalyst, at least one of the compounds X or Y being a silicone compound, provided that the compounds X, Y and the catalyst are not present simultaneously in the same composition, said compounds X and Y being capable of reacting with one another by a hydrosilylation reaction in the presence of a catalyst, when they are brought into contact with one another, and the hydrophobic solid particles being present in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.

2. Kit according to Claim 1, comprising at least:

- a first composition comprising, in a physiologically acceptable medium, at least one compound X, and

- a second composition comprising, in a physiologically acceptable medium, at least one compound Y,

with at least one of said first and second compositions additionally including at least the hydrophobic solid particles, and at least one of the first and second compositions additionally including, at least one catalyst.

3. Kit according to any one of the preceding claims, characterized in that the hydrophobic solid particles have a number-average size of the primary particles between 1 nm and 100 μm , for example between 1 nm and 30 μm , preferably between 1 nm and 1 μm , or even between 1 nm and 100 nm, notably between 4 nm and 80 nm, for example between 4 nm and 50 nm, preferably between 5 nm and 20 nm.

4. Kit according to any one of the preceding claims, characterized in that the hydrophobic solid particles are selected from hydrophobic solid particles that are naturally hydrophobic, solid particles whose surface has been rendered hydrophobic, and mixtures thereof.

5. Kit according to Claim 4, characterized in that the solid particles comprise solid particles that are naturally hydrophobic selected from polytetrafluoroethylene powders, silicone resin powders, hollow hemispherical silicone particles, powders of

acrylic copolymers, powders of waxes, polyethylene powders, powders of crosslinked elastomeric organopolysiloxane coated with silicone resin, polyamide powders, microspheres based on acrylic copolymers, expanded powders, powders of ethylene-acrylate copolymer, lauroyl-lysine, and mixtures thereof.

5 6. Kit according to Claim 4, characterized in that the solid particles comprise hydrophobic solid particles selected from particles whose surface has been rendered hydrophobic by coating, for example with hydrocarbon compounds, siliconized, fluorinated or fluoro-siliconized, or as a result of a chemical treatment.

10 7. Kit according to any one of the preceding claims, characterized in that the hydrophobic solid particles are dispersed in an apolar medium.

8. Kit according to any one of the preceding claims, characterized in that the hydrophobic solid particles are present at a content ranging from 0.1 to 50 wt.%, for example from 0.5 to 30 wt.%, preferably from 1 to 20 wt.%, or even from 5 to 20 wt.%, and preferably from 10 to 15 wt.% relative to the total weight of the kit.

15 9. Kit according to any one of the preceding claims, characterized in that the hydrophobic solid particles and the compounds X and Y are present at a weight ratio ranging from 20/1 to 1/2, for example from 20/1 to 1/1, and preferably from 10/1 to 2/1.

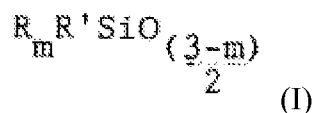
20 10. Kit according to any of the preceding claims, characterized in that compound X is selected from silicone compounds comprising at least two unsaturated aliphatic groups.

11. Kit according to the preceding claim, characterized in that compound X is a polyorganosiloxane comprising a silicone main chain whose unsaturated aliphatic groups are pendant from the main chain (side group) or located at the ends of the main chain of the compound (end group).

25 12. Kit according to the preceding claim, characterized in that compound X bears at least one polar group.

13. Kit according to any of the preceding Claims, characterized in that compound X is selected from the polyorganosiloxanes comprising at least two unsaturated aliphatic groups each attached to a silicon atom.

30 14. Kit according to any of the preceding Claims, characterized in that compound X is selected from the polyorganosiloxanes comprising siloxane units of formula:



in which:

- R represents a linear or cyclic, monovalent hydrocarbon group, having from 1 to 30 carbon atoms,

5 - m is equal to 1 or 2 and

- R' represents:

- an unsaturated aliphatic hydrocarbon group having from 2 to 10, preferably from 3 to 5 carbon atoms or

- an unsaturated cyclic hydrocarbon group having from 5 to 8 carbon atoms.

10

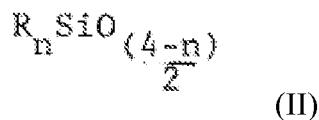
15. Kit according to the preceding claim, characterized in that the polyorganosiloxane of formula (I) is such that R' represents a vinyl group or a group -R''-CH=CHR''' in which R'' is a divalent aliphatic hydrocarbon chain, having from 1 to 8 carbon atoms, bound to the silicon atom and R''' is a hydrogen atom or an alkyl radical having from 1 to 4 carbon atoms, preferably a hydrogen atom.

15

16. Kit according to Claim 14 or 15, characterized in that R represents an alkyl radical having from 1 to 10 carbon atoms or alternatively a phenyl group, and is preferably a methyl group, and R' is a vinyl group.

17. Kit according to one of Claims 11 to 16, characterized in that the polyorganosiloxanes additionally comprise units of formula:

20



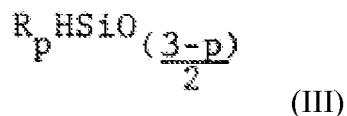
in which R represents a linear or cyclic, monovalent hydrocarbon group, having from 1 to 30 carbon atoms, and n is equal to 1, 2 or 3.

18. Kit according to Claim 1 to 9, characterized in that compound X is selected from organic oligomers or polymers, hybrid organic/silicone oligomers or polymers, said oligomers or polymers bearing at least 2 unsaturated reactive aliphatic groups.

25

19. Kit according to one of Claims 1 to 18, characterized in that compound Y comprises at least two free Si-H groups.

20. Kit according to one of Claims 1 to 19, characterized in that compound Y is selected from the polyorganosiloxanes comprising at least one alkylhydrogenosiloxane unit with the following formula:



5 in which:

R represents a linear or cyclic, monovalent hydrocarbon group, having from 1 to 30 carbon atoms or a phenyl group, and p is equal to 1 or 2.

21. Kit according to the preceding claim, characterized in that compound Y is such that the radicals R represent a C₁-C₁₀ alkyl group, preferably methyl.

10 22. Kit according to one of Claims 19 to 21, in which Y is a polyorganosiloxane comprising at least two alkylhydrogenosiloxane units of formula -(H₃C)(H)Si-O- and optionally containing units -(H₃C)₂SiO-.

23. Kit according to one of Claims 1 to 22, characterized in that the catalyst is a catalyst based on platinum or tin.

15 24. Kit according to the preceding claim, characterized in that the catalyst is present at a content ranging from 0.0001 to 20 wt.% relative to the total weight of the composition containing it.

20 25. Kit according to any one of Claims 1 to 19, characterized in that compound X is a polydimethylsiloxane with vinylic end groups and compound Y is a polymethylhydrogenosiloxane.

26. Kit according to any one of the preceding claims, characterized in that compound X bears at least one polar group that is able to form a hydrogen bond with keratinous substances.

25 27. Kit according to any one of the preceding claims, characterized in that it comprises, in at least one of the compositions, a filler selected from silica or surface-treated silica.

28. Kit according to one of the preceding claims, characterized in that compound X has a weight-average molecular weight (M_w) in the range from 150 to 1 000 000, preferably from 200 to 800 000, more preferably from 200 to 250 000.

30 29. Kit according to one of the preceding claims, characterized in that

compound Y has a weight-average molecular weight (Mw) in the range from 200 to 1 000 000, preferably from 300 to 800 000, more preferably from 500 to 250 000.

30. Kit according to one of the preceding claims, characterized in that compound X represents from 0.1 to 95 wt.% relative to the total weight of the composition containing it, preferably from 1 to 90% and more preferably from 5 to 80%.

31. Kit according to one of the preceding claims, characterized in that compound Y represents from 0.1 to 95 wt.% relative to the total weight of the composition containing it, preferably from 1 to 90% and more preferably from 5 to 80%.

32. Kit according to one of the preceding claims, characterized in that compounds X and Y are present in the compositions in a molar ratio X/Y in the range from 0.05 to 20, and preferably from 0.1 to 10.

33. Cosmetic method for colouring the hair and/or care and/or make-up of keratinous substance(s) comprising at least the application (a) of at least some hydrophobic solid particles, (b) of one or more compounds X, (c) of one or more compounds Y, with at least one of the compounds X and Y being a silicone compound and said compounds X and Y being capable of reacting with one another by a hydrosilylation reaction in the presence of a catalyst, when they are brought into contact with one another, and (d) of at least one catalyst, and applications (a), (b), (c) and (d) can be simultaneous or consecutive in any order provided that it is favourable to the interaction of said compounds X and Y, said hydrophobic solid particles being used in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.

34. Method according to Claim 33, characterized in that at least compound X is present in a first composition, and at least compound Y is present in a second composition.

35. Method according to the preceding claim, characterized in that the solid particles are present in at least one of the first and second compositions, and at least one of said first and second compositions additionally including at least one catalyst.

36. Method according to Claim 34 or 35, characterized in that the first and second compositions are mixed together, in an extemporaneous way, before application.

37. Method according to Claim 34 or 36, characterized in that the solid particles are present in a third composition comprising at least one physiologically acceptable medium, at least one of said first, second and third compositions comprising, in

addition at least one catalyst.

38. Method according to Claim 37, comprising at least the following successive steps:

- (i) the extemporaneous mixing of a first composition comprising at least one compound X and of a third composition comprising at least some solid particles,
 - (ii) the application of the mixture obtained at the end of step (i) on all or part of at least one keratinous substance, and
 - (iii) the application of a second composition comprising at least one compound Y, and at least one of said first, second and third compositions additionally including at least one catalyst,
- said steps being carried out in the order (i), (ii) and (iii).

39. Method according to Claim 37, comprising at least the following successive steps:

- (i) the extemporaneous mixing of a first composition comprising at least one compound X and of a second composition comprising at least one compound Y,
 - (ii) the application of the mixture obtained at the end of step (i) on all or part of at least one keratinous substance, and
 - (iii) the application of a third composition comprising at least some solid particles, and at least one of said first, second and third compositions additionally including at least one catalyst,
- said steps being carried out in the order (i), (ii) and (iii).

40. Method according to any one of Claims 33 to 39, characterized in that the keratinous substances are keratin fibres, for example the hair.

41. Method according to any one of Claims 33 to 40, characterized in that at least one step is interrupted by hairstyling, rinsing or drying, preferably drying.

42. Cosmetic kit for colouring the hair and/or care and/or make-up of keratinous substance(s) comprising at least two different compositions packaged separately, the kit comprising at least some hydrophobic solid particles, one or more compounds X, one or more compounds Y, and, optionally at least one catalyst, at least one of the compounds X or Y being a silicone compound, provided that the compounds X, Y and the catalyst when it is present, are not present simultaneously in the same composition, said compounds X and Y being capable of reacting with one another by a condensation

reaction, when they are brought into contact with one another, and the hydrophobic solid particles being present in a weight ratio (hydrophobic solid particles)/(compounds X + Y) varying from 100/1 to 1/2.