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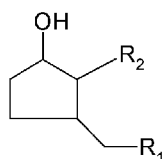
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(54) Title: COSMETIC COMPOSITION COMPRISING A CUCURBIC ACID COMPOUND AND A HYDROPHOBIC INULIN



(I)

(57) Abstract: The invention relates to a cosmetic composition in oil-in-water emulsion form comprising a cucurbic acid compound of formula (I) in which R₁ represents a radical COOR₃, R₃ denoting H or a C₁-C₄ alkyl radical, optionally substituted with one or more hydroxyl groups; R₂ represents a hydrocarbon-based radical containing from 1 to 18 carbon atoms; an inulin bearing hydrophobic ester or carbamate groups, an oily phase and an aqueous phase. Use for caring for and making up keratin materials.



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**Cosmetic composition comprising a cucurbitic acid compound
and a hydrophobic inulin**

5 The present invention relates to cosmetic compositions in oil-in-water emulsion form comprising a cucurbitic acid compound and an inulin bearing hydrophobic groups, and also to the use of these compositions in a process for treating human keratin materials.

10 More particularly, the compositions of the invention are intended for caring for and/or making up keratin materials.

For the purposes of the invention, the term "keratin materials" is intended to denote, for example, the skin, mucous membranes, the lips, the scalp, the eyelashes, the eyebrows and the hair.

15 Patent application EP-A-1 333 021 discloses hydrogenated cucurbitic acid compounds such as 3-hydroxy-2-pentylcyclopentaneacetic acid for promoting desquamation of the skin and stimulating epidermal renewal, combating the signs of ageing of the skin, improving the radiance of the complexion and/or making facial skin smooth. In patent
20 application FR-A-62921255, these compounds are also described for their use as depigmenting agents.

However, introducing these hydrogenated cucurbitic acid compounds into an oil-in-water emulsion gives rise to instability of the composition, especially after storage for
25 one month, or even two months at room temperature (25°C): the emulsion then shows phase separation of oil at the surface; the oil globules dispersed in the aqueous phase have a coarse aspect, making the emulsion non-uniform.

The aim of the present invention is thus to provide an oil-in-water emulsion comprising
30 the hydrogenated cucurbitic acid compound that is stable, especially after storage for one month, or even two months at room temperature (25°C).

The inventor has discovered that such a stable emulsion can be obtained by using a particular inulin bearing hydrophobic groups.

35 More specifically, the present invention relates to a composition in oil-in-water emulsion form, comprising a cucurbitic acid compound of formula (I), an inulin bearing a hydrophobic group chosen from hydrophobic carbamate or ester groups, an oily phase and an aqueous phase.

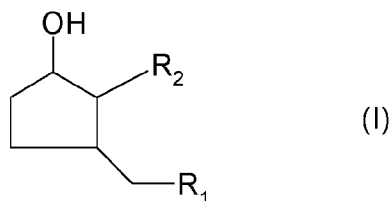
40 The composition according to the invention is in particular a cosmetic composition.

Surprisingly, the inventors have observed that the addition of a cucurbic acid compound to a composition comprising an inulin bearing a hydrophobic carbamate or ester group does not significantly affect the viscosity of the said composition and thus enables it to be formulated in a form that is suited to its handling during its application.

Further, the composition according to the invention presents good cosmetic properties such as for example, it is less sticky, easily spread (without drag) and bring comfort.

According to yet another of its subjects, the present invention relates to a non-therapeutic treatment process for caring for or making up keratin materials, comprising the application to the said keratin materials of a composition in accordance with the invention.

The cucurbic acid-based compound is a compound chosen from those corresponding to formula (I) below:



in which:

- R_1 represents a radical COOR_3 , R_3 denoting a hydrogen atom or a $\text{C}_1\text{-C}_4$ alkyl radical, optionally substituted with one or more hydroxyl groups;
 - R_2 represents a saturated or unsaturated linear hydrocarbon-based radical containing from 1 to 18 carbon atoms or a saturated or unsaturated branched or cyclic hydrocarbon-based radical containing from 3 to 18 carbon atoms;
- and also the optical isomers thereof, and the corresponding salts.

Preferably, R_1 denotes a radical chosen from $-\text{COOH}$, $-\text{COOMe}$, $-\text{COO-CH}_2\text{-CH}_3$, $-\text{COO-CH}_2\text{-CH(OH)-CH}_2\text{OH}$, $-\text{COOCH}_2\text{-CH}_2\text{-CH}_2\text{OH}$ and $-\text{COOCH}_2\text{-CH(OH)-CH}_3$. Preferentially, R_1 denotes a radical $-\text{COOH}$.

Preferentially, R_2 denotes a linear, saturated or unsaturated hydrocarbon-based radical, preferably containing from 2 to 7 carbon atoms. In particular, R_2 may be a pentyl, pentenyl, hexyl or heptyl radical.

According to one embodiment, the compound of formula (I) is chosen from 3-hydroxy-2-[(2Z)-2-pentenyl]cyclopentaneacetic acid and 3-hydroxy-2-pentylcyclopentaneacetic

acid. Preferably, compound (I) is 3-hydroxy-2-pentylcyclopentaneacetic acid; this compound may especially be in the form of the sodium salt.

5 The salts of the compounds that may be used according to the invention are chosen in particular from salts of alkali metals, for example sodium or potassium; salts of alkaline-earth metals, for example calcium, magnesium or strontium, metal salts of aluminium, manganese or copper; ammonium salts of formula NH_4^+ ; quaternary ammonium salts; salts of organic amines, for instance salts of methylamine, dimethylamine, trimethylamine, triethylamine, ethylamine, 2-hydroxyethylamine, bis(2-
10 hydroxyethyl)amine or tris(2-hydroxyethyl)amine; lysine or arginine salts. Salts chosen from sodium, potassium, magnesium, strontium, copper, manganese and zinc salts are preferably used. The sodium salt is preferentially used.

15 The compound of formula (I) defined previously may be present in the composition according to the invention in a content ranging from 1% to 10% by weight, and preferably from 1.5% to 5% by weight, relative to the total weight of the composition.

The composition according to the invention comprises an inulin bearing hydrophobic groups chosen from hydrophobic carbamate or ester groups.

20 The term "hydrophobic carbamate group" means a $\text{C}_4\text{-C}_{32}$ alkyl carbamate group, i.e. a group $-\text{OCONH-R}$, R being a $\text{C}_4\text{-C}_{32}$ alkyl.

The term "hydrophobic ester group" means a $\text{C}_4\text{-C}_{32}$ alkyl ester group, i.e. a group $-\text{OCO-R}$, R being a $\text{C}_4\text{-C}_{32}$ alkyl.

25 These hydrophobic groups are especially derived from the reaction of the hydroxyl groups of the starting inulin with either an isocyanate R-N=C=O (to form a carbamate group) or an acid R-COOH or acid chloride R-COCl (to form an ester group).

30 Inulin is part of the fructan family.

Fructans or fructosans are oligosaccharides or polysaccharides comprising a sequence of anhydrofructose units optionally combined with several saccharide residues other than fructose. Fructans may be linear or branched. Fructans may be products obtained directly from a plant or microbial source or alternatively products
35 whose chain length has been modified (increased or decrease) by fractionation, synthesis or hydrolysis, in particular enzymatic. Fructans generally have a degree of polymerization from 2 to about 1000 and preferably from 2 to about 60.

Three groups of fructans are distinguished. The first group corresponds to products whose fructose units are for the most part linked via β -1-2 bonds. These are
40 essentially linear fructans such as inulins.

The second group also corresponds to linear fructoses, but the fructose units are essentially linked via β -2-6 bonds. These products are levans.

The third group corresponds to mixed fructans, i.e. containing β -2-6 and β -2-1 sequences. These are essentially branched fructans, such as graminans.

5

Inulin may be obtained, for example, from chicory, dahlia or Jerusalem artichoke. Preferably, the inulin used in the composition according to the invention is obtained, for example, from chicory.

10 In particular, the inulin has a degree of polymerization that may range from 2 to 100 and preferably from 2 to 70.

Advantageously, the hydrophobic carbamate group is a C_6 - C_{20} alkyl carbamate group.

Preferably, the hydrophobic carbamate group is a C_8 - C_{18} alkyl carbamate group.

15 Preferentially, the hydrophobic carbamate group is a C_{10} - C_{18} alkyl carbamate group. More preferentially, the hydrophobic carbamate group is a C_{10} - C_{14} alkyl carbamate group.

According to a more preferred embodiment, the hydrophobic carbamate group is a lauryl carbamate group (C_{12} alkyl group).

20

Inulins bearing hydrophobic carbamate groups are described, for example, in patent application WO 99/64549.

Advantageously, the hydrophobic ester group is a C_6 - C_{20} alkyl ester group. Preferably,

25 the hydrophobic ester group is a C_8 - C_{20} alkyl ester group. Preferentially, the hydrophobic ester group is a C_{10} - C_{20} alkyl ester group. More preferentially, the hydrophobic ester group is a C_{10} - C_{18} alkyl ester group.

Inulins bearing hydrophobic ester groups are described, for example, in patent US
30 5 877 144.

Preferably, an inulin bearing hydrophobic carbamate groups is used.

35 The inulin bearing hydrophobic carbamate or ester groups may have a degree of substitution (proportion of OH of the inulin substituted with a hydrophobic group) ranging from 0.01 to 0.5, preferably ranging from 0.02 to 0.4 and preferentially ranging from 0.05 to 0.35. Advantageously, the degree of substitution may range from 0.1 to 0.3.

As examples of inulins bearing hydrophobic ester groups, mention may be made of stearyl inulin, such as the products sold under the names Lifidrem INST by the company Engelhard and Rheopearl INS by the company Ciba; palmitoyl inulin; undecylenoyl inulin, such as the products sold under the names Lifidrem INUK and Lifidrem INUM by the company Engelhard.

An example of an inulin bearing hydrophobic carbonate groups that may be mentioned is inulin lauryl carbamate, such as the product sold under the name Inutec SP1 by the company Beneo.

The inulin bearing hydrophobic ester or carbamate groups may be present in the composition according to the invention in a content ranging from 0.1% to 3% by weight relative to the total weight of the composition. Preferably, the content of the said copolymer may range from 0.1% to 2% by weight relative to the total weight of the composition.

Preferentially, the content of the said copolymer may range from 0.2% to 2.5% by weight relative to the total weight of the composition.

Advantageously, the cucurbitic acid compound of formula (I) (referred to as A) and the inulin bearing hydrophobic groups (referred to as B) described previously may be present in the composition according to the invention in an A/B weight ratio ranging from 3 to 10.

Preferably, this A/B weight ratio may range from 4 to 9.

The viscosity of a composition of the invention may be measured via any process known to those skilled in the art, and especially according to the following conventional process. Thus, the measurement may be performed at 25°C using a Rheomat 180 viscometer equipped with a spindle rotating at 200 rpm. A person skilled in the art may select the spindle for measuring the viscosity from the spindles M1, M2, M3 and M4 on the basis of his general knowledge, so as to be able to perform the measurement.

The cosmetic composition according to the invention comprises a physiologically acceptable medium, i.e. a medium that is compatible with human keratin materials and/or fibres, for instance, in a non-limiting manner, the skin, mucous membranes, the nails, the scalp and the hair.

The composition comprises an aqueous phase.

The composition may comprise water in a content ranging from 20% to 95% by weight, preferably ranging from 30% to 90% by weight and preferentially ranging from 40% to 70% by weight, relative to the total weight of the composition.

- 5 The water may be a floral water such as cornflower water and/or a mineral water such as Vittel water, Lucas water or La Roche Posay water and/or a spring water.

- The composition may also comprise an organic solvent that is water-miscible at room temperature (25°C), chosen especially from monoalcohols containing from 2 to 6
10 carbon atoms, such as ethanol or isopropanol;
polyols especially containing from 2 to 20 carbon atoms, preferably containing from 2 to 10 carbon atoms and preferentially containing from 2 to 6 carbon atoms, such as glycerol, propylene glycol, butylene glycol, pentylene glycol, hexylene glycol, dipropylene glycol or diethylene glycol;
15 glycol ethers (especially containing from 3 to 16 carbon atoms) such as mono-, di- or tripropylene glycol (C₁-C₄)alkyl ethers, and mono-, di- or triethylene glycol (C₁-C₄)alkyl ethers;
and mixtures thereof.

- 20 The composition according to the invention may comprise a solvent that is miscible with water at room temperature, in a content ranging from 1% to 20% by weight and preferably ranging from 3% to 15% by weight relative to the total weight of the composition.
- 25 Advantageously, the composition according to the invention has a pH ranging from 5.5 to 7.5.

The emulsion according to the invention also comprises an oily phase.

- 30 As oils that may be used in the composition of the invention, examples that may be mentioned include:
- hydrocarbon-based oils of plant origin, such as liquid triglycerides of fatty acids containing from 4 to 10 carbon atoms, for instance heptanoic or octanoic acid triglycerides, or alternatively, for example, sunflower oil, corn oil, soybean oil, marrow
35 oil, grapeseed oil, sesame seed oil, hazelnut oil, apricot oil, macadamia oil, arara oil, castor oil, avocado oil, caprylic/capric acid triglycerides, for instance those sold by the company Stearineries Dubois or those sold under the names Miglyol 810, 812 and 818 by the company Dynamit Nobel, jojoba oil and shea butter oil;
 - synthetic esters and ethers, especially of fatty acids, for instance the oils of formulae
40 R₁COOR₂ and R₁OR₂ in which R₁ represents a fatty acid residue containing from 8 to 29 carbon atoms and R₂ represents a branched or unbranched hydrocarbon-based

- chain containing from 3 to 30 carbon atoms, for instance Purcellin oil, isononyl isononanoate, isopropyl myristate, 2-ethylhexyl palmitate, 2-octyldodecyl stearate, 2-octyldodecyl erucate or isostearyl isostearate; hydroxylated esters, for instance isostearyl lactate, octyl hydroxystearate, octyldodecyl hydroxystearate, diisostearyl
- 5 malate or triisocetyl citrate; fatty alcohol heptanoates, octanoates or decanoates; polyol esters, for instance propylene glycol dioctanoate, neopentyl glycol diheptanoate and diethylene glycol diisononanoate; and pentaerythritol esters, for instance pentaerythrityl tetraistearate;
- linear or branched hydrocarbons of mineral or synthetic origin, such as volatile or
- 10 non-volatile liquid paraffins, and derivatives thereof, petroleum jelly, polydecenes, and hydrogenated polyisobutene such as Parleam oil;
- fatty alcohols containing from 8 to 26 carbon atoms, for instance cetyl alcohol, stearyl alcohol and a mixture thereof (cetylstearyl alcohol), octyldodecanol, 2-butyloctanol, 2-hexyldecanol, 2-undecylpentadecanol, oleyl alcohol or linoleyl alcohol;
- 15 - partially hydrocarbon-based and/or silicone-based fluoro oils, for instance those described in document JP-A-2 295 912;
- silicone oils, for instance volatile or non-volatile polymethylsiloxanes (PDMS) with a linear or cyclic silicone chain, which are liquid or pasty at room temperature, especially cyclopolydimethylsiloxanes (cyclomethicones) such as cyclohexasiloxane;
- 20 polydimethylsiloxanes comprising alkyl, alkoxy or phenyl groups, which are pendent or at the end of a silicone chain, these groups containing from 2 to 24 carbon atoms; phenylsilicones, for instance phenyl trimethicones, phenyl dimethicones, phenyltrimethylsiloxydiphenylsiloxanes, diphenyl dimethicones, diphenylmethyldiphenyltrisiloxanes or 2-phenylethyl trimethylsiloxyl silicates, and
- 25 polymethylphenylsiloxanes;
- mixtures thereof.

In the list of oils mentioned above, the term "hydrocarbon-based oil" means any oil mainly comprising carbon and hydrogen atoms, and possibly ester, ether, fluoro,

30 carboxylic acid and/or alcohol groups.

The other fatty substances that may be present in the oily phase are, for example, fatty acids containing from 8 to 30 carbon atoms, for instance stearic acid, lauric acid, palmitic acid and oleic acid; waxes, for instance lanolin wax, beeswax, carnauba wax

35 or candelilla wax, paraffin wax, lignite wax or microcrystalline waxes, ceresin or ozokerite, and synthetic waxes, for instance polyethylene waxes and Fischer-Tropsch waxes; silicone resins such as trifluoromethyl-C₁₋₄-alkyl dimethicone and trifluoropropyl dimethicone; and silicone elastomers, for instance the products sold under the name KSG by the company Shin-Etsu, under the name Trefil, BY29 or EPSX by the

40 company Dow Corning, or under the name Gransil by the company Grant Industries.

These fatty substances may be chosen in a varied manner by a person skilled in the art so as to prepare a composition having the desired properties, for example in terms of consistency or texture.

- 5 The proportion of the oily phase of the emulsion may range from 5% to 80% by weight and preferably from 5% to 50% by weight relative to the total weight of the composition.

10 The composition according to the invention may comprise an additional emulsifier other than the inulin bearing a hydrophobic carbamate or ester group described previously.

Additional emulsifiers that may be mentioned include:

oxyalkylenated (more particularly polyoxyethylenated) fatty acid esters of glycerol; oxyalkylenated fatty acid esters of sorbitan; oxyalkylenated (oxyethylenated and/or
15 oxypropylenated) fatty acid esters; oxyalkylenated (oxyethylenated and/or oxypropylenated) fatty alcohol ethers; sugar esters such as sucrose stearate; and mixtures thereof, such as the mixture of glyceryl stearate and PEG-40 stearate; ethoxylated (15 EO) sodium ethyldiamido-n-cocoyl sulfonate or alternatively the mixture of ethoxylated (15 EO) sodium ethyldiamido-n-cocoyl sulfonate, glyceryl
20 stearate, glyceryl stearate monocitrate and behenyl alcohol, such as the product sold under the name Ceralution® H by the company Sasol; dimethicone copolyols, for instance bis-PEG/PPG-16/16 PEG/PPG-16/16 dimethicone, such as the product sold under the name Abil Care 85 by the company Evonik-Goldschmidt.

25 According to one embodiment of the composition according to the invention, the additional emulsifier is ethoxylated (15 EO) sodium ethyldiamido-n-cocoyl sulfonate, especially the mixture of ethoxylated (15 EO) sodium ethyldiamido-n-cocoyl sulfonate, glyceryl stearate, glyceryl stearate monocitrate and behenyl alcohol, such as the
30 product sold under the name Ceralution® H by the company Sasol.

According to one embodiment of the composition according to the invention, the additional emulsifier is a dimethicone copolyol, especially bis-PEG/PPG-16/16 PEG/PPG-16/16 dimethicone, such as the product sold under the name Abil Care 85
35 by the company Evonik-Goldschmidt.

The additional emulsifier may be present in the composition of the invention in a proportion ranging from 0.3% to 30% by weight and in particular from 0.5% to 20% by weight relative to the total weight of the composition.

40

The composition according to the invention may also contain adjuvants that are common in the field under consideration, such as emulsifiers, hydrophilic or lipophilic gelling agents, waxes, hydrophilic or lipophilic additives, preserving agents, antioxidants, solvents, fragrances, fillers, UVA and/or UVB screening agents (organic
5 or mineral, soluble or insoluble), pigments, fibres, chelating agents, odour absorbers, dyestuffs and other cosmetic active agents.

The amounts of these various adjuvants are those conventionally used in the cosmetics field, and may range, for example, from 0.01% to 30% of the total weight of
10 the composition. In general, the amounts are adjusted as a function of the formulation prepared. Depending on their nature, these adjuvants may be introduced into the fatty phase, into the aqueous phase and/or into lipid spherules.

Advantageously, the composition according to the invention may comprise a silicone elastomer. Examples of silicone elastomers are described in patent application WO-A-
15 2009/080 958.

A composition according to the invention may be in the form of a care product, an antisen or after-sun product, a daily photoprotective care product, a body product, a
20 foundation to be applied to the face or the neck, a concealer product, a complexion corrector, a tinted cream or a makeup base for making up the face, or a body makeup composition.

A composition according to the invention may be used for the purposes of improving
25 the general condition of the epidermis, in particular of the skin, and especially for maintaining or restoring its physiological functions and/or its aesthetic appearance.

Other characteristics and advantages of the invention will emerge more clearly from the examples that follow, which are given as non-limiting illustrations. In the text
30 hereinbelow or hereinabove, the proportions are given as weight percentages, unless otherwise indicated.

Comparative Examples 1 to 3:

35 Three compositions (facial care cream) described in the table below were prepared: a composition according to the invention (Ex. 3) containing the sodium salt of 3-hydroxy-2-pentylcyclopentaneacetic acid and inulin lauryl carbamate, and two compositions not forming part of the invention: one not containing inulin lauryl carbamate (Ex. 1), the other not containing the acid active agent (Ex. 2).

The viscosity of the compositions obtained was then measured after 24 hours of storage at room temperature (viscosity measured at 25°C using a Rheomat 180 viscometer with an M3 spindle after 10 minutes of rotation at 200 rpm).

Centrifugation of the composition was also performed for 1 hour at 25°C and at 900×g.

A microscopic evaluation of the composition was also made.

The stability of each composition after storage for 2 months at 25°C was also evaluated.

The following results were obtained:

10

Example	1 (HI)	2 (HI)	3
Sodium salt of 3-hydroxy-2-pentylcyclopentaneacetic acid at 30% in a water/dipropylene glycol mixture (70/30)	13.4%, i.e. 4% AM	-	13.4%, i.e. 4% AM
Water	qs 100	qs 100	qs 100
Polyacrylamidomethylpropanesulfonic acid partially neutralized ammonia and highly crosslinked (Hostacerin AMPS® from Clariant)	1.4	1.4	1.4
Inulin lauryl carbamate (Inutec SP1 from Beneo)	-	0.5	0.5
Condensate of ethylene oxide and propylene oxide and ethylene oxide (128 EO/54 PO/128 EO) (Synperonic PE/F 108 from Croda)	0.15	0.15	0.15
Mixture of ethoxylated (15 EO) sodium ethyldiamido-n-cocoyl sulfonate/behenyl alcohol/glyceryl stearate/glyceryl stearate citrate (15/35/35/15) (Ceralution® H from Sasol)	0.3	0.3	0.3
Ethanol	5	5	5
Polymethyl methacrylate spheres (Covabead LH 85 from LCW)	0.25	0.25	0.25
Mixture of organopolysiloxane and cyclohexasiloxane (13/87) (Gransil RPS-D6 from Grant Industries)	15	15	15
Mixture of α,ω -dihydroxylated	2	2	2

polydimethylsiloxane/polydimethylsiloxane 5 cSt; Dow Corning 1503 Fluid from Dow Corning			
Polymethylsilsesquioxane (Tospearl 200 B from Momentive Performance)	0.5	0.5	0.5
Sodium hyaluronate (Cristalhyal from Soliance)	0.2	0.2	0.2
Hydroxyethylcellulose (Natrosol 250 HHR from Aqualon)	0.15	0.15	0.15
Sodium hydroxide	0.023	0.023	0.023
Silica (SB 700 from Miyoshi Kasei)	0.5	0.5	0.5
Preserving agent	qs	qs	qs
viscosity (Pa.s)	1.07	2	1.07
centrifugation	Non-homogeneous	Homogeneous	Remains homogeneous
Microscopic appearance	Very heterogeneous	Homogeneous	Homogeneous
Stability after 2 months at 25°C	Unstable	Stable	Stable

These tests showed that the placebo formula with inulin lauryl carbamate (Ex. 2) is stable.

The formula containing only the sodium salt of 3-hydroxy-2-pentylcyclopentaneacetic acid (Ex. 1) is unstable: the introduction of this active agent into the placebo support destabilizes the composition.

The formula according to the invention (Ex. 3) containing the sodium salt of 3-hydroxy-2-pentylcyclopentaneacetic acid and inulin lauryl carbamate is stable. This inulin thus makes it possible to stabilize the composition containing the acid active agent.

Example 4:

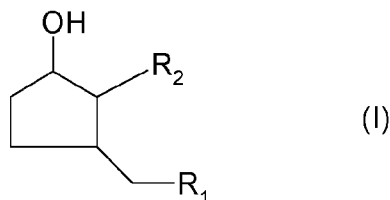
An oil-in-water emulsion facial care cream having the following composition was prepared:

Example	4
Sodium salt of 3-hydroxy-2-pentylcyclopentaneacetic acid at 30% in a water/dipropylene glycol mixture (70/30)	13.4%, i.e. 4% AM
Water	qs 100

Neutralized polyacrylamidomethylpropanesulfonic acid partially neutralized ammonia and highly crosslinked (Hostacerin AMPS® from Clariant)	1.2
Inulin lauryl carbamate (Inutec SP1 from Beneo)	0.3
Sodium hyaluronate (Cristalhyal from Soliance)	0.2
Hydroxyethylcellulose (Natrosol 250 HHR from Aqualon)	0.15
Ethanol	5
Mixture of bis-PEG/PPG-16/16 PEG/PPG-16/16 dimethicone and caprylic/capric triglyceride (87/13) (Abil Care 85 from Evonik-Goldschmidt)	2
Mixture of organopolysiloxane and cyclohexasiloxane (13/87) (Gransil RPS-D6 from Grant Industries)	15
Mixture of α,ω -dihydroxylated polydimethylsiloxane/polydimethylsiloxane 5 cSt; Dow Corning 1503 Fluid from Dow Corning	2
Pentaerythrityl tetraoctanoate	2
Polymethyl methacrylate (Micropearl M 310 from Matsumoto Yushi-Seiyaku)	1.25
Smectite (Veegum from Vanderbilt)	2.0
Preserving agent	qs
viscosity (Pa.s)	1.2
centrifugation	Remains homogeneous
Microscopic appearance	Homogeneous
Stability after 2 months at 25°C	Stable

CLAIMS

1. Cosmetic composition in the form of an oil-in-water emulsion comprising a compound of formula (I) below:



5

in which:

R_1 represents a radical COOR_3 , R_3 denoting a hydrogen atom or a C_1 - C_4 alkyl radical, optionally substituted with one or more hydroxyl groups;

- 10 - R_2 represents a saturated or unsaturated linear hydrocarbon-based radical containing from 1 to 18 carbon atoms or a saturated or unsaturated branched or cyclic hydrocarbon-based radical containing from 3 to 18 carbon atoms; and also the optical isomers thereof, and the corresponding salts; an inulin bearing hydrophobic groups chosen from C_4 - C_{32} alkyl carbamate groups and
- 15 C_4 - C_{32} alkyl ester groups; an oily phase and an aqueous phase.

2. Composition according to Claim 1, characterized in that compound (I) is such that R_1 denotes a radical chosen from $-\text{COOH}$, $-\text{COOMe}$, $-\text{COO}-\text{CH}_2-\text{CH}_3$, $-\text{COO}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}_2\text{OH}$, $-\text{COOCH}_2-\text{CH}_2-\text{CH}_2\text{OH}$ and $-\text{COOCH}_2-\text{CH}(\text{OH})-\text{CH}_3$; R_2 denotes a linear, saturated or unsaturated hydrocarbon-based radical containing from 2 to 6 carbon atoms.

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3. Composition according to Claim 1 or 2, characterized in that compound (I) is 3-hydroxy-2-pentylcyclopentaneacetic acid.

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4. Composition according to any one of the preceding claims, characterized in that the compound of formula (I) is present in a content ranging from 1% to 10% by weight and preferably ranging from 1.5% to 5% by weight relative to the total weight of the composition.

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5. Composition according to any one of the preceding claims, characterized in that the hydrophobic groups of the inulin are chosen from C_{10} - C_{18} alkyl carbamate groups and C_{10} - C_{18} alkyl ester groups.

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6. Composition according to any one of the preceding claims, characterized in that it comprises an inulin bearing lauryl carbamate groups.
- 5 7. Composition according to any one of the preceding claims, characterized in that the inulin bearing hydrophobic groups is present in a content ranging from 0.1% to 3% by weight, preferably ranging from 0.1% to 2% by weight and preferentially ranging from 0.2% to 2.5% by weight relative to the total weight of the composition.
- 10 8. Composition according to any one of the preceding claims, characterized in that it comprises an additional emulsifier.
9. Non-therapeutic process for treating keratin materials, comprising the application to the said keratin materials of a cosmetic composition as defined according to one of the preceding claims.