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(71) **Applicant** *(for all designated States except US)*: **DSM IP ASSETS B.V.** [NL/NL]; Het Overloon 1, NL-6411 TE Heerlen (NL).

(72) **Inventors; and**
(75) **Inventors/Applicants** *(for US only)*: **MENDROK-EDINGER, Christine** [DE/CH]; c/o DSM Nutritional Products Ltd, Patent Department, P.O. Box 2676, CH-4002 Basel (CH). **JANSSEN, Anne** [DE/CH]; c/o DSM Nutritional Products Ltd, Patent Department, P.O. Box 2676, CH-4002 Basel (CH).

(74) **Agent**: **BERG, Katja**; c/o DSM Nutritional Products Ltd, Wurmisweg 573, CH-4303 Kaiseraugst (CH).

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(54) **Title**: COSMETIC OR DERMATOLOGICAL EMULSIONS

(57) **Abstract**: The present invention relates to cosmetic or dermatological emulsions comprising at least one silicone oil, at least one W/Si emulsifier, from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof and from 0.1 to 2.5 wt.-% of at least one phosphate ester emulsifier.

Cosmetic or dermatological emulsions

The present invention relates to cosmetic or dermatological emulsions comprising at least one silicone oil, at least one W/Si emulsifier, from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof and from 0.1 to 2.5 wt.-% of at least one phosphate ester emulsifier.

Sun care products have evolved considerably over the years. Earlier formulations were intended to protect the user from UV-B radiation (UVB) as was once thought that UV-B rays were the most important contributors to wrinkling, skin disease, and skin cancer. However, more recent studies have shown that UV-A radiation (UVA) is equally or even more important in the development of solar damage and skin diseases, such as lupus erythematosus and melanoma and non-melanoma skin cancers. Thus, today's focus is toward eliminating as much of UVA (320-400 nm) light as possible. Consequently, there's a constantly increasing need for sun care products exhibiting a high UVA protection.

Sun care products based on emulsions comprising significant amounts of silicone oils and water-in-silicon (W/Si) emulsifiers such as e.g. water-in-silicone emulsions are highly appreciated in the Asian market.

Due to the increasing demand for high UVA protection, it is desirable to incorporate elevated levels of UVA-filter substances into sun care products. In case of the most commonly used UVA filter substance butyl methoxydibenzoylmethane (BMDBM) this requires the presence of at least one solubilising agent as BMDBM is solid and can not be incorporated as such. As BMDBM exhibits no or only a very limited solubility in silicone oils, hydrocarbon based cosmetic oils have to be used to solubilize BMDBM. The amounts of hydrocarbon based cosmetic oils necessary for the solubilisation of high amounts of BMDBM (i.e. amounts of 2.5 – 5 wt.-%), however, render emulsions comprising significant amounts of silicone oils and W/Si emulsifiers such as water-in-

silicone emulsions instable. Thus, so far it was not possible to incorporate high amounts of BMDBM into such emulsions.

It was therefore the object of the present invention to remedy the disadvantages of the prior art and to develop stable cosmetic or dermatological emulsions comprising silicone oils, W/Si emulsifiers as well as high amounts of BMDBM. Furthermore, the cosmetic or dermatological emulsions should exhibit a low viscosity and produce a light skin feel as there is an ongoing demand from the Asian market for such product forms.

Surprisingly, it has been found that the addition of an oil-in-water (O/W) emulsifier of the phosphate ester type is suitable to stabilize cosmetic or dermatological emulsions comprising silicone oils, W/Si emulsifiers and high amounts of BMDBM solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof. Furthermore, it has been found that Amphisol reduces the viscosity and thus allows the production of low viscosity emulsions.

Thus, in one embodiment the invention relates to a cosmetic or dermatological emulsion comprising

(i) at least one silicone oil,

(ii) at least one W/Si emulsifier,

(iii) from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof and,

(iv) from 0.1 to 2.5 wt.-% of at least one phosphate ester emulsifier.

These emulsions are stable, exhibit a reduced viscosity and, upon cosmetic and/or dermatological application thereof, give excellent UV-A protection and produce a silky light skin sensation in combination with a pleasantly dry, powdery residue on the skin.

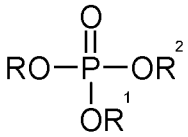
In another embodiment the invention is directed to the use of a phosphate ester emulsifier in an amount ranging from 0.1 to 2.5 wt.-% for the stabilization of cosmetic or

dermatological emulsions comprising at least one silicone oil, at least one W/Si emulsifier, and from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof as well as to the use of a phosphate ester emulsifier in an amount ranging from 0.1 to 2.5 wt.-% for reducing the viscosity of cosmetic or dermatological emulsions comprising at least one silicone oil, at least one W/Si emulsifier, and from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof.

Preferably, in all embodiments of the invention the phosphate ester emulsifier is employed in an amount ranging from 0.2 to 2 wt.-% such as in particular in an amount of 0.5-1 wt.-% and BMDBM is employed in an amount ranging from 3 to 4 wt.-%.

Butyl methoxydibenzoylmethane (INCI Name, abbreviated as BMDBM) is also known as avobenzone respectively 4-tert-Butyl-4'-methoxy-dibenzoylmethane and has the CAS No.: 70356-09-1. BMDBM is e.g. available as Parsol® 1789 by DSM Nutritional. BMDBM may currently be used in sunscreen products up to a maximum concentration of 5 wt.-%.

Phosphate esters emulsifiers suitable for the purpose of the present invention have the formula



wherein R, R^1 and R^2 may be hydrogen, an alkyl group of from 1 to about 22 carbons, preferably from about 12 to 18 carbons, or an alkoxylated alkyl group of from 1 to about 22 carbons, preferably from about 12 to 18 carbons comprising 1 or more, preferably from about 2 to about 25, most preferably 2 to 12, moles ethylene oxide, with the provision that at least one of R, R^1 and R^2 is an alkyl or alkoxylated alkyl group as previously defined having at least 6 alkyl carbons in said alkyl or alkoxylated alkyl group.

Monoesters in which R^1 and R^2 are hydrogen and R is selected from alkyl groups of 10 to 18 carbons and alkoxylated alkyl groups of 10 to 18 carbons and 2 to 12 moles ethylene oxide are preferred. Among the preferred phosphate ester emulsifiers, mention may be made of, C_{8-10} Alkyl Ethyl Phosphate, C_{9-15} Alkyl Phosphate, Ceteareth-2 Phosphate, Ceteareth-5 Phosphate, Ceteth-8 Phosphate, Ceteth-10 Phosphate, Cetyl Phosphate, C_{6-10} Pareth-4 Phosphate, C_{12-15} Pareth-2 Phosphate, C_{12-15} Pareth-3 Phosphate, DEA-Ceteareth-2 Phosphate, DEA-Cetyl Phosphate, DEA-Oleth-3 Phosphate, Potassium cetyl phosphate, Deceth-4 Phosphate and Deceth-6 Phosphate. Particular preferred phosphate ester emulsifiers according to the invention are cetyl phosphate, potassium cetyl phosphate and/ or DEA cetyl phosphate such as most in particular potassium cetyl phosphate (e.g. available as Amphisol® K at DSM Nutritional Products Ltd.).

Advantageous cosmetic or dermatological emulsions according to the invention comprise from 0.5 to 1 wt.-% of potassium cetyl phosphate and from 3 to 4 wt.-% of BMDBM.

The term oil i.e. silicon oil as well as hydrocarbon based oil as used according to the present invention refer to all oils suitable for cosmetic application. Such oils are well known to a person in-the art and can e.g. be found in K.F. De Polo: A Short Textbook of Cosmetology; Verlag für chemische Industrie, H. Ziolkowsky GmbH, Augsburg; 1998; L. Träger: Chemie in der Kosmetik heute; 4. Aufl.; Health and Beauty, Karlsruhe; 2000; P.C. Schmidt, I. Christin: Wirk- und Hilfsstoffe für Rezeptur, Defektur und Grossherstellung; Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1999; INCI dictionary under www.specialchem4cosmetics.com.

Due to their polarity the hydrocarbon based oil(s) selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof are suitable as solubilising agent for BMDBM. Advantageously the oils exhibit a polarity of 35 mN/m or less, such as in particular of 31 mN/m or less.

Preferably, the hydrocarbon based oil(s) selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof are selected such that the solubility of BMDBM in the respective oil(s) is at least 5 wt.-%, preferably at least 10 wt.-% such as in particular at least 14 wt.-%.

The amount of the at least one hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof used in the cosmetic or dermatological emulsions according to the invention is selected such that all BMDBM is solubilizable at room temperature.

The solubility may be determined by standard methods in the art such as e.g. by over-saturation of the oil with BMDBM at room temperature in a step-by-step procedure and storage of the mixture for 7 days under continuous stirring, determination of the content of BMDBM in the supernatant by HPLC or can be retrieved from published data such as e.g. under http://www.cosmeticingredients.co.uk/parsol1789solubility.pdf.

Representatives of fatty acid triglycerides encompass in particular triglycerides of saturated and/or unsaturated, branched and/or unbranched alkane-carboxylic acids of a chain length of 8 to 24, in particular 12 to 18 carbon atoms. The fatty acid triglycerides can, for example, advantageously be chosen from the group consisting of the synthetic, semisynthetic and natural oils, such as, for example, coconut glyceride, olive oil, sunflower oil, soybean oil, peanut oil, rapeseed oil, almond oil, palm oil, coconut oil, castor oil, wheat germ oil, grape seed oil, thistle oil, evening primrose oil, macadamia nut oil and suchlike.

Representatives of fatty acid esters encompass esters of saturated and/or unsaturated, branched and/or unbranched alkanecarboxylic acids of a chain length of 3 to 30 carbon atoms and saturated and/or unsaturated, branched and/or unbranched alcohols of a chain length of 3 to 30 carbon atoms. Such fatty acid esters can advantageously be chosen from the group consisting of octyl palmitate, octyl cocoate, octyl stearate, octyl isostearate, octyldodeceyl myristate, octyldodecanol, cetearyl isononanoate, isopropyl

myristate, isopropyl palmitate, isopropyl stearate, isopropyl oleate, n-butyl stearate, n-hexyl laurate, n-decyl oleate, isooctyl stearate, isononyl stearate, isononyl-isononanoate, 2-ethylhexyl palmitate, 2-ethylhexyl laurate, 2-hexyldecyl stearate, 2-octyl-dodecyl palmitate, stearyl heptanoate, oleyl oleate, oleyl erucate, erucyl oleate, erucyl erucate, tridecyl stearate, propylene glycol dicaprylate/dicaprate, and also synthetic, semisynthetic and natural mixtures of such esters, such as, for example, jojoba oil. Furthermore, the term fatty acid esters encompasses polyhydric alcohol esters such as in particular ethylene glycol mono and di-fatty acid esters, diethylene glycol mono- and di-fatty acid esters, polyethylene glycol (200-6000) mono- and di-fatty acid esters, propylene glycol mono- and di-fatty acid esters, glyceryl mono- and di-fatty acid esters, polyglycerol polyfatty esters, polyoxyethylene polyol fatty acid ester, sorbitan fatty acid esters, and polyoxyethylene sorbitan fatty acid esters such as in particular 1,3-butylene glycol monostearate, 1,3-butylene glycol distearate, polypropylene glycol monooleate, polypropylene glycol monostearate, ethoxylated propylene glycol monostearate, ethoxylated glyceryl monostearate, dipentaerythrityl hexacaprylate/hexacaprate, tricaprylin and triisostearin.

Representatives of aromatic esters encompass esters of aromatic carboxylic acids and saturated and/or unsaturated, branched and/or unbranched alcohols of a chain length of 3 to 30 carbon atoms as well as esters of aromatic carboxylic acids with substituted or unsubstituted such as in particular methyl substituted cyclohexylalcohols. Particularly preferred aromatic esters are isostearyl benzoate, C_{12-15}-alkyl benzoate, octyl methoxycinnamate, homosalate, octyl salicylate, octocrylene, tridecyl trimellitate, diethylhexyl 2,6-naphthalate (Corapan® TQ by Symrise) and Phenethyl Benzoate (X-Tend 226).

Representatives of aromatic ketones encompass in particular octocrylene.

Representatives of dialkylcarbonates and dialkyl ethers encompass dialkyl ethers and dialkyl carbonates such as e.g. dicaprylyl ether (Cetiol OE) and/or dicaprylyl carbonate (Cetiol CC from Cognis).

Representatives of dicarboxylic acid esters encompass diisopropyl sebacate, caprylic/capric/diglyceryl succinate and/ or diethylhexyl malate.

Advantageously, the hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof is selected from the group consisting of octyl methoxycinnamate (e.g. Parsol® MCX by DSM Nutritional products Ltd., octocrylene (e.g. Parsol® 340 by DSM Nutritional products Ltd.), octyl salicylate (e.g. Parsol® EHS by DSM Nutritional products Ltd.), homosalate (e.g. Parsol® HMS by DSM Nutritional products Ltd.), C_{12-15}-alkyl benzoate (e.g. Finsolv TN from Finetex Inc.), isostearyl benzoate (Finsolv SB), isopropyl PPG-2 isodeceth-7 carboxylate (Velsan D8P-3 from Clariant), diisopropyl sebaceate (e.g. DUB DIS from Stearinerie-dubois), dibutyl adipate (Cetiol B by Henkel), diisopropyl adipate, polyglycerol-isostearate, diethylhexyl maleate (Bernel Ester DOM), polyglyceroyl-2 diisostearate, ethylhexyl ethylhexanoate (Dragoxat EH 2/044115), caprylic/ capric triglyceride (Miglyol 812 by Unichema Huels), propylene glycol dicaprylate/ caprate (e.g. Miglyol 840 by Unichema Huels), cocoglycerides (Glyceryl Caprylate/Caprate/Cocoate, e.g. Myritol® 331 by Cognis), butylene glycol dicaprylate/dicaprate (e.g. Dermofeel BGC by Straetmans), isopropyl myristate (Tegosoft M), octyl stearate, cocoglycerides (Myritol 331), di-C12-13 alkyl malate (EMI), di-C12-13 alkyl tartrate (Cosmacol ETI), diethylhexyl adipate (Crodamol DOA), diethylhexyl carbonate (Tegosoft DEC), diethylhexyl malate (Ceraphyl 45), ddiethylhexyl sebacate (DUB DOS), diisopropyl adipate (Crodamol DA), dipentaerythrityl hexacaprylate/hexacaprate (DUB DPHCC), ethylhexyl adipate, ethylhexyl cocoate (Estol 1540), hexyl laurate (Cetiol A), isopropyl C12-15 pareth-9 carboxylate (Velsan P8-3), isopropyl palmitate (Estol 1517), neopentyl glycol diheptanoate (DUB DNPG), octyl malate, octyldodecyl benzoate (Finsolv BOD), PEG-7 glyceryl cocoate (Cetiol HE), phenethyl benzoate (X-Tend 226), propylene glycol myristyl ether acetate (Hetester PMA), tridecyl salicylate (Cosmacol ESI), triethylhexanoin (Estol 3609) and dicaprylyl carbonate (e.g. Cetiol CC from Cognis) as well as mixtures thereof such as particularly from the group consisting of octyl methoxycinnamate, octocrylene, octyl salicylate, homosalate, C_{12-15}-alkyl benzoate, isostearyl benzoate, isopropyl PPG-2 isodeceth-7 carboxylate, dibutyl adipate, diisopropyl adipate, diisopropyl sebacate (DUB DIS), polyglycerol-isostearate, diethylhexyl malate, polyglyceroyl-2 diisostearate,

ethylhexyl ethylhexanoate, caprylic/ capric triglyceride, propylene glycol dicaprylate/ caprate, cocoglycerides, butylene glycol dicaprylate/dicaprate, isopropyl myristate, octyl stearate and dicaprylyl carbonate as well as mixtures thereof and more particularly from the group of consisting of octyl methoxycinnamate, octocrylene, octyl salicylate, homosalate, C_{12-15}-alkyl benzoate, diisopropyl sebacate and dicaprylyl carbonate as well as mixtures thereof such as in a mixture of octocrylene, diisopropyl sebacate and dicaprylyl carbonate. Preferably, mixtures of hydrocarbon based oils are used in the emulsions according to the invention.

The total amount of the hydrocarbon based oils selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof in the cosmetic or dermatological emulsions according to the present invention is preferably ranging from about 10 to 30 wt.-% such as in particular in an amount ranging from about 15-30 wt-% based on the total weight of the cosmetic or dermatological emulsion.

Suitable silicone oils and/ or waxes according to the invention are polyorganosiloxanes such as for example dimethylpolysiloxane [INCI poly(dimethylsiloxane), dimethicone, e.g. Abil 10 to 10 000 (Goldschmidt) or Xiameter PMX 200 Silicone fluid (Dow Corning)]; cyclic silicones such as e.g. cyclopentasiloxane; octamethylcyclotetrasiloxane [CAS No. 556-67-2], hexamethyl cyclotrisiloxane [CAS No 541-05-9] and decamethylcyclopentasiloxane [CAS No. 541-02-6] which are also designated according to INCI as Cyclomethicone and are e.g. commercially available as Dow Corning 245 Fluid, Dow Corning 244 Fluid or Xiameter PMX 0245; amino-modified silicones (INCI: Amodimethicone) such as e.g. Dow Corning 2-8566 Amino Fluid; polysiloxane-poly-alkylene copolymers (INCI: Stearyl Dimethicone and Cetyl Dimethicone) and dialkoxydimethylpolysiloxanes (Stearoxy Dimethicone and Behenoxy Stearyl Dimethicone) which are e.g. obtainable from Goldschmidt as various Abil wax types; alkyl methyl siloxane such as cetyl dimethicone (Dow corning 2502 cosmetic Fluid, Abil® wax 9801), Trisiloxane, Octamethyltrisiloxane; stearyl dimethicone (Dow Corning 2503 Cosmetic Wax); C_{30-40} alkyldimethylsilyl polypropylsilsesquioxane (Dow Corning SW-8005 C30 Resin Wax); functional silicone fluids such as phenylmethylpolysiloxane (INCI: Phenyl Dimethicone, phenyl trimethicone such as e.g. Dow corning 556 Cosmetic Grade

Fluid); trimethyl pentaphenyl trisiloxane (Dow Corning PH 1555), aminopropyl phenyl trimethicone (Dow Corning 2-2078), silicone gum blends such as cyclopentasiloxane and dimethiconol (Dow Corning 1501 Fluid), dimethiconol (Dow Corning 1503 Fluid) and bis-hydroxyethoxypropyl dimethicone (Dow Corning 5562).

Further suitable silicone oils are silicone based UV-filters such as in particular polysiloxane-15 (Parsol® SLX by DSM Nutritional products).

Advantageous silicone oils or waxes to be incorporated into the cosmetic or dermatological emulsions according to the invention are dimethicone, cyclomethicone, octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, hexamethyl cyclotrisiloxane, cetyl dimethicone and polysiloxane-15 as well as mixtures thereof.

The total silicone oil content in the cosmetic or dermatological emulsion according to the invention advantageously ranges from 10 to 80 wt.-% such as e.g. from 10 to 60 wt.-% and particularly from 15 to 30 wt.-% based on the total weight of the cosmetic or dermatological emulsion.

The cosmetic or dermatological emulsions according to the present invention generally comprise (i) lipophilic components such as the silicone oils, the hydrocarbon based oil(s) selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones, BMDBM and other lipophilic materials (lipophilic part) and (ii) aqueous components such as water and other hydrophilic materials ("aqueous part").

The lipophilic part generally constitutes from about 50-90 wt.-%, such as in particular from about 60-90 wt.-% and the aqueous part from about 10-50 wt.-% such as in particular from about 10-40 wt.-% of the cosmetic or dermatological emulsion according to the present invention.

The cosmetic or dermatological emulsions furthermore contain at least one suitable W/Si emulsifier such as e.g. dimethicone PEG 10/15 crosspolymer, dimethicone copolyol, cetyl dimethicone copolyol, and PEG-15 lauryl dimethicone crosspolymer,

laurylmethicone crosspolymer, cyclomethicone and dimethicone copolyol, dimethicone copolyol (and) caprylic/capric triglycerides, polyglyceryl-4 isostearate (and) cetyl dimethicone copolyol (and) hexyl laurate, and dimethicone copolyol (and) cyclopentasiloxane, PEG-9 Polydimethylsiloxyethyl Dimethicone (KF-6028 ShinEtsu), Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone (KF-6105 ShinEtsu), Lauryl Dimethicone/Polyglycerin-3 Crosspolymer (KSG-810 ShinEtsu) and Dimethicone/PEG-10/15 Crosspolymer (KSG-210 ShinEtsu), PEG/PPG-18/18 Dimethicone (Dow Corning 5225C), PEG-12 Dimethicone Crosspolymer (Dow Corning 9011), Cetyl PEG/PPG-10/1 Dimethicone (Abil EM-90) without being limited thereto.

Further suitable W/Si emulsifiers encompass silicone elastomers such as cyclopentasiloxane and dimethicone crosspolymer (Dow Corning 9040 / 9045), dimethicone/vinyldimethicone crosspolymer (Dow Corning 9506), cyclopentasiloxane and dimethicone crosspolymer and dimethicone/vinyldimethicone crosspolymer and dimethiconol (Dow Corning 9546); silicone polyethers such as PEG-12 dimethicone (Dow Corning 193 C or 5329), PEG/PPG-15/15 dimethicone, Bis-PEG-18 methyl ether dimethyl silane (Dow Corning 2501 Cosmetic Wax), as well as silicone resins (to improve water resistance) such as dimethicone and trimethylsiloxysilicate (Dow Corning 593 Fluid).

Particularly preferred W/Si emulsifiers to be used in the cosmetic or dermatological emulsions according to the invention are PEG/PPG-18/18 Dimethicone (Dow Corning 5225C Formulation Aid), PEG-12 Dimethicone Crosspolymer (Dow Corning 9011) and/ or Cetyl PEG/PPG-10/1 Dimethicone (Abil EM-90).

The water-in-silicone emulsifiers typically will be present in the cosmetic or dermatological emulsions in an amount from about 0.001 to 15 wt.-%, in particularly in an amount of about 0.1-10 wt.-% such as in an amount of 0.5-8.0 wt.-% based on the total weight of the cosmetic or dermatological emulsions.

Advantageous cosmetic or dermatological emulsion according to the invention accordingly comprise from 15 to 30 wt.-% of at least one silicone oil, from 0.5-8.0 wt.-% of at least one W/Si emulsifier, from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane

solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof wherein the total amount of hydrocarbon based oil ranges from 10-30 wt.-% and from 0.1 to 2.5 wt.-% of at least one phosphate ester emulsifier, such as particularly from 15 to 30 wt.-% of at least one silicone oil selected from the group consisting of dimethicone, cyclomethicone, octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, hexamethyl cyclotrisiloxane, cetyl dimethicone and polysiloxane-15 as well as mixtures thereof, from 0.5-8.0 wt.-% of at least one W/ Si emulsifier selected from the group consisting of PEG/PPG-18/18 Dimethicone (Dow Corning 5225C Formulation Aid), PEG-12 Dimethicone Crosspolymer (Dow Corning 9011) and/ or Cetyl PEG/PPG-10/1 Dimethicone (Abil EM-90), from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of octyl methoxycinnamate, octocrylene, octyl salicylate, homosalate, C_{12-15}-alkyl benzoate, diisopropyl sebacate and dicaprylyl carbonate as well as mixtures thereof such as in particular of octocrylene, diisopropyl sebacate and dicaprylyl carbonates as well as mixtures thereof wherein the total amount of hydrocarbon based oil ranges from 15-30 wt.-% and from 0.1 to 2.5 wt.-% of potassium cetyl phosphate.

The cosmetic or dermatological emulsions according to the invention can contain further cosmetic and/or dermatological active ingredients, excipients and additives which are customarily used in such emulsions such as in particular preservatives, preservation aids, perfumes, substances for preventing foaming, colorants, pigments which have a coloring action, thickening agents, moisturizing and/or humectant substances, fillers which improve the skin sensation, fats, oils, waxes as well as other customary constituents for cosmetic or dermatological emulsion such as alcohols, polyols, polymers, foam stabilizers, electrolytes or organic solvents. The cosmetic or dermatological emulsions may furthermore contain further organic and/or inorganic oil-soluble, water-soluble and/or pigmentary UV filter substances. These ingredients, excipients and additives may, based on their hydrophobic respectively hydrophilic character, be incorporated either in the aqueous or in the silicone phase of the cosmetic or dermatological emulsions or may be added to the final emulsion by standard methods known to a person skilled in the art.

In a particular embodiment, the cosmetic or dermatological emulsions according to the present invention comprises further UV-filter substances such as in particular UVA, UVB and/ or broadspectrum UV-filter substances.

Such particular UVA, UVB and/ or broadspectrum UV-filter substances comprise all compounds which are or can be used as cosmetically acceptable UVA, UVB or broadspectrum UV-filter substances. Such UV-filter substances are e.g. listed in the CTFA Cosmetic ingredient Handbook or "The Encyclopedia of Ultraviolet Filters" (ISBN: 978-1-932633-25-2) by Nadim A. Shaath.

The total amount of UV-filter substances (including butyl dimethoxydibenzoylmethane) in the cosmetic or dermatological emulsions according to the invention is preferably in the range of about 1 to 40 wt.-%, more preferably in the range of about 5 to 30 wt.-% such as in particular in the range of about 10 to 30 wt.-% based on the total weight of the cosmetic or dermatological emulsion.

Suitable UVA, UVB and/ or broadspectrum UV-filter substances may be organic or inorganic compounds. Exemplary UVA, UVB and/ or broadspectrum UV-filter substances encompass e.g. acrylates such as e.g. 2-ethylhexyl 2-cyano-3,3-diphenylacrylate (octocrylene, PARSOL® 340), ethyl 2-cyano-3,3-diphenylacrylate; Camphor derivatives such as e.g. 4-methyl benzylidene camphor (PARSOL® 5000), 3-benzylidene camphor, camphor benzalkonium methosulfate, polyacrylamidomethyl benzylidene camphor, sulfo benzylidene camphor, sulphomethyl benzylidene camphor, terephthalylidene dicamphor sulfonic acid (Mexoryl® SX); cinnamate derivatives such as e.g. ethylhexyl methoxycinnamate (PARSOL® MCX), ethoxyethyl methoxycinnamate, isoamyl methoxycinnamate as well as cinnamic acid derivatives bond to siloxanes; p-aminobenzoic acid derivatives such as e.g. p-aminobenzoic acid, 2-ethylhexyl p-dimethylaminobenzoate, N-oxypropylenated ethyl p-aminobenzoate, glyceryl p-aminobenzoate; benzophenones such as e.g. benzophenone-3, benzophenone-4, 2,2',4,4'-tetrahydroxy-benzophenone, 2,2'-dihydroxy-4,4'-dimethoxybenzophenone; esters of benzalmalonic acid such as e.g. di-(2-ethylhexyl) 4-methoxybenzalmalonate; organosiloxane compounds carrying chromophore groups such as e.g. polysilicones-15

(PARSOL® SLX), drometrizole trisiloxane (Mexoryl® XL); imidazole derivatives such as e.g. 2-phenyl benzimidazole sulfonic acid (PARSOL®HS) and salts thereof such as e.g. sodium- or potassium salts, ammonium salts, morpholine salts, salts of primary, sec. and tert. amines like monoethanolamine salts, diethanolamine salts; salicylate derivatives such as e.g. isopropylbenzyl salicylate, benzyl salicylate, butyl salicylate, ethylhexyl salicylate (PARSOL® EHS, Neo Heliopan® OS), isooctyl salicylate or homomenthyl salicylate (homosalate, PARSOL® HMS, Neo Heliopan® HMS); triazine derivatives such as e.g. ethylhexyl triazone (Uvinul® T-150), diethylhexyl butamido triazone (Uvasorb® HEB), bis-ethylhexyloxyphenol methoxyphenyl triazine (Tinosorb® S), 2,4,6-tris[1,1'-biphenyl]-4-yl-1,3,5-Triazine [CAS No. 31274-51-8]; Benzotriazole derivatives such as e.g. 2,2'-methylene-bis-(6-(2H-benzotriazole-2-yl)-4-(1,1,3,3,-tetramethylbutyl)-phenol (Tinosorb® M); encapsulated UV-filters such as e.g. encapsulated ethylhexyl methoxycinnamate (Eusolex® UV-pearls) or microcapsules loaded with UV-filters as e.g. dislosed in EP 1471995; amino substituted hydroxybenzophenones such as e.g. 2-(4-diethylamino-2-hydroxy-benzoyl)-benzoic acid hexylester (Aminobenzophenon, Uvinul® A Plus); benzoxazol-derivatives such as e.g. 2,4-bis-[5-1(dimethylpropyl)benzoxazol-2-yl-(4-phenyl)-imino]-6-(2-ethylhexyl)-imino-1,3,5-triazin (Uvasorb® K2A); phenylene-1,4-bis-benzimidazolsulfonic acids or salts thereof such as e.g. 2,2-(1,4-phenylene)bis-(1H-benzimidazol-4,6-disulfonic acid) (Neoheliopan® AP); 1,1'-(1,4-piperazinediyl)bis[1-[4-(diethylamino)-2-hydroxybenzoyl]phenyl]-methanone (CAS No. 919803-06-6); Bis(butylbenzoate) diaminotriazine aminopropyltrisiloxane (CAS No. 207562-42-3).

Inorganic UV-filter substances encompass pigments such as e.g. microparticulated zinc oxide or titanium dioxide (e.g. commercially available as PARSOL® TX) The term "microparticulated" refers to a particle size from about 5 nm to about 200 nm, particularly from about 15 nm to about 100 nm. The particles may also be coated by other metal oxides such as e.g. aluminum or zirconium oxides or by organic coatings such as e.g. polyols, methicone, aluminum stearate, alkyl silane. Such coatings are well known in the art.

Preferred UVB-filter substances to be incorporated into the cosmetic or dermatological emulsions according to the present invention encompass polysilicones-15,

phenylbenzimidazol sulfonic acid, octocrylene, ethylhexyl methoxycinnamate, ethyl hexylsalicylate and/ or homosalate.

Preferred broadband UV-filter substances to be incorporated into the cosmetic or dermatological emulsions according to the present invention encompass unsymmetrical s-triazine derivatives such as in particular 2,4-Bis-{[4-(2-ethyl-hexyloxy)-2-hydroxy]-phenyl}-6-(4-methoxyphenyl)-1,3,5-triazin; certain benzophenones such as e.g. 2-Hydroxy-4-methoxy-benzophenon; 2,2'-Methylen-bis-(6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethyl-butyl)-phenol), and/ or titanium dioxide.

Preferred UVA-filter substances to be incorporated into the cosmetic or dermatological emulsions according to the present invention encompass 2-(4-diethylamino-2-hydroxy-benzoyl)-benzoic acid hexylester (Aminobenzophenon, Uvinul® A Plus); 2,4-bis-[5-1(dimethylpropyl)benzoxazol-2-yl-(4-phenyl)-imino]-6-(2-ethylhexyl)-imino-1,3,5-triazin [Uvasorb® K2A); 2,2-(1,4-phenylene)bis-(1H-benzimidazol-4,6-disulfonic acid) (Neoheliopan AP); in particular 2-(4-diethylamino-2-hydroxy-benzoyl)-benzoic acid hexylester (Aminobenzophenon, Uvinul® A Plus).

In order to enhance the photostability of butyl methoxydibenzoylmethane the cosmetic or dermatological emulsion according to the present invention may advantageously contain a suitable photostabilizer as well as mixtures of different photostabilizers. Exemplary photostabilizers known to a skilled person in the art encompass e.g. 3,3-diphenylacrylate derivatives such as e.g. octocrylene (PARSOL® 340) or Polyester-8 (Polycrylene®); Methoxycrylene (Solastay); benzylidene camphor derivatives such as e.g. 4-methyl benzylidene camphor (PARSOL® 5000); benzalmalonate derivatives such as e.g. polysilicones-15 (PARSOL® SLX) or diethylhexyl syringylidene malonate (Oxynex ST liquid); dialkyl naphthalates such as diethylhexyl naphthalate (Corapan TQ); Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine (Tinosorb S); Benzotriazol Derivatives such as Benzotriazolyl Dodecyl p-Cresol (Tinogard TL) without being limited thereto. An overview on further stabilizers is e.g. given in 'SPF Boosters & Photostability of Ultraviolet Filters', HAPPI, October 2007, p. 77-83 which is included herein by reference. The photostabilizers are generally used in an amount of 0.05 to 10 wt.-% with respect to the total weigh of the cosmetic or dermatological emulsion.

The UV-filter substances are incorporated either in the aqueous or in the lipophilic part of the cosmetic or dermatological emulsions depending if they are water or oil (fat) soluble/ miscible UV filter substances or may even be added to the final emulsion by standard methods known to a person skilled in the art.

Advantageous preservatives within the meaning of the present invention are, for example, formaldehyde-cleaving agents (such as, for example, DMDM hydantoin, which is obtainable, for example, from Lonza under the trade name Glydant), iodopropinylbutyl carbamates (e.g. those obtainable from Lonza under the trade names Glydant-2000, Glycacil-L, Glycacil-S, and/or Dekaben LMB from Jan Dekker), parabens (i.e. alkyl p-hydroxybenzoates, such as methyl-, ethyl-, propyl- and/or butylparaben), phenoxy-ethanol, ethanol, benzoic acid, salicylic acid, 2-Bromo-2-Nitropropane-1,3-Diol (Bronopol, Rokonsal-SE), Methyldibromoglutaronitrile, Methylchloroisothiazolinone and Methylisothiazolinone (Rokonsal KS-4, Kathon CG) and suchlike. Customarily, the preservation system according to the invention furthermore advantageously also comprises preservation aids, such as, for example, octoxyglycerol, glycine soja, ethylhexyl glycerine etc.

Particularly advantageous cosmetic or dermatological emulsions are furthermore obtained if antioxidants are employed as additives or active ingredients. According to the invention, the emulsions advantageously contain one or more antioxidants. As antioxidants which are favorable, but nevertheless to be used optionally, it is possible to use all antioxidants suitable or customary for cosmetic and/or dermatological applications.

Particularly advantageously within the meaning of the present invention, it is possible to use water-soluble antioxidants, such as, for example, vitamins, e.g. ascorbic acid and its derivatives.

Preferred antioxidants are furthermore vitamin E and its derivatives and also vitamin A and its derivatives.

The amount of antioxidants (one or more compounds) in the preparations is preferably 0.001 to 30% by weight, particularly preferably 0.05 to 20% by weight, in particular 0.1 to 10% by weight, based on the total weight of the preparation.

If vitamin E and/or its derivatives are the antioxidant(s), it is advantageous to choose their respective concentrations from the range from 0.001 to 10wt.-% preferably in the range of 0.1 to 1 wt.-%, based on the total weight of cosmetic or dermatological emulsion.

If vitamin A or vitamin A derivatives, or carotenes or their derivatives are the antioxidant(s), it is advantageous to choose their respective concentrations from the range from 0.001 to 10% by weight, based on the total weight of the cosmetic or dermatological emulsion.

It is particularly advantageous if the cosmetic or dermatological emulsions according to the present invention contain cosmetic or dermatological active ingredients, preferred active ingredients being antioxidants which can protect the skin from oxidative stress as well as BHT.

Further advantageous active ingredients within the meaning of the present invention are natural active ingredients and/or their derivatives, such as, for example, alpha-lipoic acid, phytoene, D-Biotin, Coenzyme Q10, alpha-glucosylrutin, carnitine, carnosine, natural and/or synthetic isoflavonoids, creatine, taurine beta.-alanine, Ropufa 10 or 25, Panthenol, Allantoin, Folic Acid, Pepha Protect, Alpaflor Buddleja, Niacinamide PC, Radiance CR, Gigawhite, Melfade J, BeauPlex VH, Alpaflor Edelweiss, D,L-alpha tocopheryl acetate, Stay-C 50, Dismutin PF, Alpaflor Nectapure, Alpaflor Abi-complex, Syn-Ake, BeauActive MTP, Syn-Coll, Syn-Tacks, Pepha Tight and/or Erythrulose

The aqueous part of the cosmetic or dermatological emulsions according to the invention can advantageously contain customary cosmetic excipients usually formulated into the aqueous phase, such as, for example, alcohols, in particular those of low carbon number, preferably ethanol and/or isopropanol, diols or polyols of low carbon number, and their ethers, preferably propylene glycol, glycerol, ethylene glycol, ethylene glycol

monoethyl or monobutyl ether, propylene glycol monomethyl, monoethyl or monobutyl ether, diethylene glycol monomethyl or monoethyl ether and analogous products, polymers, foam stabilizers, electrolytes, dihydoxyacetone, and in particular one or more thickening agents, which can advantageously be chosen from the group consisting of silica, aluminum silicates, polysaccharides and their derivatives, e.g. hyaluronic acid, xanthan gum, hydroxypropylmethylcellulose, particularly advantageously from the group consisting of the polyacrylates, preferably a polyacrylate from the group consisting of the "carbopols", for example carbopols of the types 980, 981, 1382, 2984, 5984, in each case individually or in combination.

Furthermore advantageous are copolymers of C_{10-30}-alkyl acrylates and one or more monomers of acrylic acid, methacrylic acid or their esters.

Compounds are advantageous which carry the INCI name "Acrylates/C_{10-30}Alkyl Acrylate Crosspolymer". Those obtainable under the trade names Pemulen TR1 and Pemulen TR2 from the B. F. Goodrich Company are particularly advantageous.

Compounds are advantageous which carry the INCI name Ammonium acryloyldimethyltaurate/Vinylpyrrolidone copolymer.

Preferred species within the meaning of the present invention are filed in Chemical Abstracts under the registry numbers 58374-69-9, 13162-05-5 and 88-12-0 and are obtainable under the trade name Aristoflex® AVC of Clariant GmbH.

Furthermore advantageous are copolymers/crosspolymers comprising Acryloyldimethyl Taurate, such as, for example, Simulgel® EG or Simulgel® 600 from Seppic S.A.

Further thickening agents which can be used advantageously according to the invention are also anionic polyurethanes which are soluble or dispersible in water. Those advantageous within the meaning of the present invention are, for example, polyurethane-1 and/or polyurethane-4.

Particularly advantageous polyurethanes within the meaning of the present invention are the types obtainable under the trade name Avalure™ UR from the B. F. Goodrich Company, such as, for example, Avalure™ UR 445, Avalure™ UR 450 and the like. Furthermore advantageous within the meaning of the invention is also the polyurethane obtainable under the trade name Luviset Pur from BASF.

Humectants (moisturizers) can preferably also be used. Moisturizers are designated as substances or substance mixtures which impart to cosmetic or dermatological preparations the property, after application to or dispersion on the skin surface, of reducing the release of moisture from the horny layer (also called transepidermal water loss (TEWL)) and/or positively influencing the hydration of the horny layer.

Advantageous moisturizers within the meaning of the present invention are, for example, glycerol, lactic acid and/or lactates, in particular sodium lactate, butylene glycol, propylene glycol, biosaccaride gum-1, Glycine soja, ethylhexyloxyglycerol, pyrrolidone-carboxylic acid and urea. Furthermore, it is particularly advantageous to use polymeric moisturizers from the group consisting of the polysaccharides which are water-soluble and/or swellable in water and/or gellable with the aid of water. For example, hyaluronic acid, chitosan and/or a fucose-rich polysaccharide, which is filed in Chemical Abstracts under the registry number 178463-23-5 and, for example, is obtainable under the name Fucogel®1000 from SOLABIA S.A., are particularly advantageous.

The cosmetic or dermatological emulsions according to the invention can be composed as customary cosmetic and/or dermatological preparations and serve for cosmetic or dermatological light protection, furthermore for the treatment and care of the skin and/or of the hair and as a make-up product in decorative cosmetics.

According to their structure, cosmetic or dermatological emulsions within the meaning of the present invention can, for example, be used as a skin cream, sunscreen, or day cream etc.

For application, the cosmetic or dermatological emulsions are applied to the skin and/or the hair in adequate amount in the manner customary for cosmetics.

In a particular preferred embodiment the cosmetic or dermatological emulsions are sun-care preparations for the protection of human skin against the detrimental effects of UV-light (i.e. sunscreens or day care preparations with UV protection). Thus, the invention also relates to the use of cosmetic or dermatological emulsions according to the present invention as sun-screening agent.

If not indicated otherwise all wt.-% given in the application are based on the total weight of the cosmetic or dermatological emulsions according to the invention.

The following examples are intended to illustrate the present invention without restricting it. All quantitative data, proportions and percentages are, if not stated otherwise, based on the weight and the total amount or on the total weight of the preparations.

Example 1

As can be retrieved from table 1, Amphisol® K used as co-emulsifier efficiently stabilizes the cosmetic or dermatological emulsions according to the present invention. Furthermore, the viscosity could be significantly reduced.

Table 1

Ingredients	**Wt.-%**	**Wt.-%**	**Wt.-%**
Phase A			
DOW CORNING® 5225C Formulation aid	7.00	7.00	7.000
Abil® EM-90	2.00	2.00	2.00
Amphisol® K	-	0.50	1.00
Parsol® 1789	**4.00**	**4.00**	**4.00**
Parsol® 340	3.60	3.60	3.60
Parsol® SLX	3.00	3.00	3.00
DUB DIS	7.50	7.50	7.50
Cetiol® CC	15.00	15.00	15.00
DOW CORNING® 344	12.00	12.00	12.00
Phenonip	0.80	0.80	0.80

BHT	0.10	0.10	0.10
Abil® Wax 9801	1.00	1.00	1.00
Phase B			
Water dem.	Ad 100	Ad 100	Ad 100
Sodium chloride	0.500	0.500	0.500
Parsol HS	3.00	3.00	3.00
Glycerin 99.5%	2.00	2.00	2.00
Triethanolamine	2.00	2.00	2.00
EDTA	0.10	0.10	0.10
Phase C			
DOW CORNING® 245	5.00	5.00	5.00
Parsol® TX	7.50	7.50	7.50
Stability after 1 month storage at RT	instable	Stable	Stable
Viscosity	1090 [mPas]	370 [mPas]	280 [mPas]

Heat part A to 80°C under stirring. Combine ingredients of part B and neutralize Parsol HS until it is completely dissolved. Start to homogenize part A and add slowly part B. Homogenize for further 2 minutes at 17.500 rpm and let cool down under stirring. Disperse Parsol TX in part C. Add part C to the formulation at 40°C and homogenize for 30 seconds at 17.500 rpm.

Example 2

As can be retrieved from table 2, Amphisol K stabilizes the cosmetic or dermatological emulsions according to the present invention whereas the same formulation which does not contain Amphisol K is instable.

Table 2

Ingredients	**Wt.-%**	**Wt.-%**
Phase A		
DOW CORNING® 5225C Formulation aid	7.00	7.00
Abil® EM-90	2.50	2.50
Amphisol® K	-	0.50
Parsol® 1789	**4.00**	**4.00**
Parsol® 340	3.60	3.60
Parsol® SLX	3.00	3.00
DUB DIS	7.50	7.50
Cetiol® CC	15.00	15.00
DOW CORNING® 344	12.00	12.00
Phenonip	0.80	0.80
BHT	0.10	0.10
Abil® Wax 9801	1.00	1.00
Phase B		
Water dem.	Ad 100	Ad 100
Sodium chloride	0.500	0.500
Parsol® HS	3.00	3.00
Glycerin 99.5%	2.00	2.00
Triethanolamine	2.00	2.00
EDTA	0.10	0.10
Phase C		
DOW CORNING® 245	5.00	5.00
Parsol® TX	7.50	7.50
Stability [after 1 month]	instable	Stable

Heat part A to 80°C under stirring. Combine ingredients of part B and neutralize Parsol HS until it is completely dissolved. Start to homogenize part A and add slowly part B. Homogenize for further 2 minutes at 17.500 rpm and let cool down under stirring.

Disperse Parsol TX in part C. Add part C to the formulation at 40°C and homogenize for 30 seconds at 17.500 rpm.

Example 3

Paracera M can be used as emulsion stabilizer. However, as can be retrieved from table 3, Paracera M in combination with Abil® EM-90, a W/Si emulsifier is not able to stabilize the cosmetic or dermatological emulsion whereas the use of Amphisol K as co-emulsifier stabilizes the emulsion.

Table 3

Ingredients	**Wt.-%**	**Wt.-%**
Phase A		
DOW CORNING® 5225C Formulation aid	7.00	7.00
Abil® EM-90	2.50	2.50
Paracera M	0.50	-
Amphisol® K	-	0.50
Parsol® 1789	**4.00**	**4.00**
Parsol® 340	3.60	3.60
Parsol® SLX	3.00	3.00
DUB DIS	7.50	7.50
Cetiol® CC	15.00	15.00
DOW CORNING® 344	12.00	12.00
Phenonip	0.80	0.80
BHT	0.10	0.10
Abil® Wax 9801	1.00	1.00
Phase B		
Water dem.	Ad 100	Ad 100
Sodium chloride	0.500	0.500
Parsol® HS	3.00	3.00
Glycerin 99.5%	2.00	2.00
Triethanolamine	2.00	2.00
EDTA	0.10	0.10

Phase C		
DOW CORNING® 245	5.00	5.00
Parsol® TX	7.50	7.50
Stability	instable	Stable

Heat part A to 80°C under stirring. Combine ingredients of part B and neutralize Parsol HS until it is completely dissolved. Start to homogenize part A and add slowly part B. Homogenize for further 2 minutes at 17.500 rpm and let cool down under stirring. Disperse Parsol TX in part C. Add part C to the formulation at 40°C and homogenize for 30 seconds at 17.500 rpm.

Claims

1. A cosmetic or dermatological emulsion comprising
   (i) at least one silicone oil,
   (ii) at least one W/Si emulsifier,
   (iii) from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof and,
   (iv) from 0.1 to 2.5 wt.-% of at least one phosphate ester emulsifier.

2. The cosmetic or dermatological emulsion according to claim 1 comprising from 3 to 4 wt.-% of butyl methoxydibenzoylmethane and from 0.2 to 2 wt.-%, preferably from 0.5 to 1 wt.-% of at least one phosphate ester emulsifier.

3. The cosmetic or dermatological emulsion according to claim 1 and 2, wherein the phosphate ester emulsifier is selected from the group consisting of cetyl phosphate, potassium cetyl phosphate and DEA cetyl phosphate as well as mixtures thereof.

4. The cosmetic or dermatological emulsion according to claim 1 and 2, wherein the phosphate ester emulsifier is potassium cetyl phosphate.

5. The cosmetic or dermatological emulsion according to any one of claims 1 to 4, wherein the hydrocarbon based oil is selected from the group consisting of octyl methoxycinnamate, octocrylene, octyl salicylate, homosalate, C_{12-15}-alkyl benzoate, isostearyl benzoate, isopropyl PPG-2 isodeceth-7 carboxylate, dibutyl adipate, diisopropyl adipate, diisopropyl sebacate, polyglycerol-isostearate, diethylhexyl malate, polyglyceroyl-2 diisostearate, ethylhexyl ethylhexanoate, caprylic/ capric triglyceride, propylene glycol dicaprylate/ caprate, cocoglycerides, butylene glycol dicaprylate/dicaprate, isopropyl myristate, octyl stearate and dicaprylyl carbonate as well as mixtures thereof.

6. The cosmetic or dermatological emulsion according to any one of claims 1 to 5, wherein hydrocarbon based oil is selected from the group consisting of octyl methoxycinnamate, octocrylene, octyl salicylate, homosalate, C_{12-15}-alkyl benzoate, diisopropyl sebacate and dicaprylyl carbonate as well as mixtures thereof.

7. The cosmetic or dermatological emulsion according to any one of claims 1 to 6, wherein the silicone oil is selected from the group consisting dimethicone, cyclomethicone, octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, hexamethyl cyclotrisiloxane, cetyl dimethicone and polysiloxane-15 as well as mixtures thereof.

8. The cosmetic or dermatological emulsion according to any one of claims 1 to 7, wherein the W/Si emulsifier is selected form the group consisting of PEG/PPG-18/18 Dimethicone, PEG-12 Dimethicone Crosspolymer, Cetyl PEG/PPG-10/1 Dimethicone as well as mixtures thereof.

9. The cosmetic or dermatological emulsion according to any one of claims 1 to 8, wherein the total amount of hydrocarbon based oils ranges from 10 to 30 wt.-%, preferably from 15-30 wt.-% based on the total weight of the cosmetic or dermatological emulsion.

10. The cosmetic or dermatological emulsion according to any one of claims 1 to 9, wherein the total amount of silicone oils ranges from 10 to 60 wt.-%, preferably from 15 to 30 wt.-% based on the total weight of the cosmetic or dermatological emulsion.

11. The cosmetic or dermatological emulsion according to any one of claims 1 to 10, wherein the total amount of W/Si emulsifiers ranges from 0.5 to 8 wt.-%.

12. The cosmetic or dermatological emulsion according to any one of claims 1 to 11, wherein the emulsion comprises further UV-filter substances.

13. Use of a cosmetic or dermatological emulsion according to any one of claims 1 to 12 as sun-screening agent.

14. Use of a phosphate ester emulsifier in an amount ranging from 0.1 to 2.5 wt.-% for the stabilization of cosmetic or dermatological emulsions comprising at least one silicone oil, at least one W/Si emulsifier, from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof.

15. Use of a phosphate ester emulsifier in an amount ranging from 0.1 to 2.5 wt.-% for reducing the viscosity of cosmetic or dermatological emulsions comprising at least one silicone oil, at least one W/Si emulsifier, from 2.5 to 5 wt.-% of butyl methoxydibenzoylmethane solubilized in a hydrocarbon based oil selected from the group consisting of fatty acid triglycerides, fatty acid esters, dicarboxylic acid esters, fatty acid carbonates, aromatic esters and aromatic ketones as well as mixtures thereof.