
Agent: JAMES, Helen, Sarah; Unilever PLC, Unilever Patent Group, Colworth House, Sharnbrook, Bedford, Bedfordshire MK44 4LQ (GB).


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Title: MAKE-UP REMOVER COSMETIC COMPOSITIONS

Abstract: A make-up remover composition is provided which includes a blend of non-saccharide polyhydric alcohol fatty acid triester(s) and saccharide alcohol fatty acid tetraester(s) 5 with oil that effectively removes makeup under moist conditions such as with wet hands.
1. **Field of the Invention**

The invention concerns make-up removing cosmetic compositions of improved efficacy. In particular, it relates to composition that removes makeup under wet or moist conditions.

2. **Background of the Art**

An important segment of the cosmetics market are products which are utilized for removing make-up. Removal of pigments of eye shadow, mascara, blush, lipstick and face powder is a daily problem for many women. The problem has been addressed through formulations which may include materials operating by solvent action or by emulsification. However, such cleansers often have disadvantage that they must be kept away from water in order to function effectively and not phase separate. It would be convenient for persons to be able to use an effective make-up remover in the shower or bath i.e. with wet hands. Surprisingly a formulation including a blend of non-saccharide polyhydric alcohol fatty acid triester(s) and saccharide alcohol fatty acid tetraester (s) in a specific ratio and blended with oil was found to effectively remove makeup under moist conditions such as with wet hands without the problem of phase separation and compromised makeup removal efficiency.
U.S. Patent Publication No. 2005/0180942 published on August 18, 2005 to Shimizu et al. describes a cleansing composition containing nonionic surfactants selected from various glycerol fatty acid esters in an oil base and having specific IOB values. The formulation is reported to resist phase separation.

U.S. Patent Publication No. 2004/0136943 published on July 15, 2004 to Tomokuni describes a cleansing composition comprising (A) an oil component, (B) a hydrophilic nonionic surfactant, (C) a lipophilic amphiphile, (D) a water soluble solvent and (E) water. The composition reportedly has an isotropic liquid phase exhibiting a bicontinuous structure. The composition is described and exhibiting excellent detergency for the removal of both oil stains and water soluble stains and has high rinsability.

Surprisingly, it has been discovered that a substantially non-aqueous composition containing a specific ratio of non-saccharide polyhydric alcohol fatty acid triester(s) and saccharide alcohol fatty acid tetraester(s) is very effective to remove makeup under moist or wet conditions while displaying excellent in-use properties for the user of the composition.

**BRIEF DESCRIPTION OF THE INVENTION**

In one aspect of the invention is a stable cleansing composition including but not limited to:
a. 5 to 40 % by wt. of total liquid polyethylene glycol C14 to C22 fatty acid esters having a mixed IOB value in the range of 0.60 to 1.15;

b. Wherein at least one of the polyethylene glycol fatty acid esters is a non-saccharide polyhydric alcohol fatty acid triester and a second of the polyethylene glycol fatty acid esters is a saccharide alcohol fatty acid tetraester;

c. Wherein the triester and tetraester is present in the ratio range of 1.0 to 3.0;

d. 30 to 70 % by wt. of liquid oil; and

e. A maximum water content of 5 % by wt.

In another aspect of the invention is a method for removing makeup from the skin, including but not limited to the steps of:

a. applying to the skin a composition including

   i. 5 to 40 % by wt. of total liquid polyethylene glycol C14 to C22 fatty acid esters having a mixed IOB value in the range of 0.60 to 1.15;

   ii. wherein at least one of the polyethylene glycol fatty acid esters is a non-saccharide polyhydric alcohol fatty acid triester and a second of the polyethylene glycol fatty acid esters is a saccharide alcohol fatty acid tetraester;

   iii. wherein the triester and tetraester is present in the ratio range of 1.0 to 3.0;

   iv. 30 to 70 % by wt. of liquid oil; and
v. a maximum water content of 5% by wt.

b. allowing the composition to remain on the skin for a time effective to loosen, solubilise and/or disperse the makeup ingredients; and
c. rinsing the composition from the skin with water.

DETAILED DESCRIPTION OF THE INVENTION

All publications and patent applications, patents, and other references mentioned herein are incorporated by reference in their entirety.

In one aspect of the invention is a stable cleansing composition including but not limited to:

a. 5 to 40% by wt. of total liquid polyethylene glycol C14 to C22 fatty acid esters; preferably with a minimum of 7 or 10 or 15% and a maximum of 25 or 30 or 35%; having a mixed IOB value in the range of 0.60 to 1.15; preferably mixed IOB value is at least 0.65 or 0.70 and has a maximum of 1.0 or 1.05 or 1.10;

b. Wherein at least one of the polyethylene glycol fatty acid esters is a non-saccharide polyhydric alcohol fatty acid triester and a second of the polyethylene glycol fatty acid esters is a saccharide alcohol fatty acid tetraester;

c. Wherein the triester and tetraester is present in the ratio range of 1.0 to 3.0; preferably the ratio is at least 1.2, 1.4, or 1.6 and a maximum of 2.7, 2.5, or 2.3;
d. 30 to 70 % by wt. of liquid oil; preferably with a minimum of 30 or 40 or 50 % and a maximum of 55 or 60%; and

e. A maximum water content of 5 % by wt.; preferably less than 4, 3, 2, 1.5 or 1 %.

Stability is defined as the situation where the cleansing composition appears homogeneous without noticeable phase separation for at least 30 days at about 23-25 °C.

Advantageously the polyhydric alcohol fatty acid triester is a glyceryl C14 to C22 fatty acid ester, preferably the ester is a PEG-10 to 30 derivative, more preferably the fatty acid ester is C16 to C20.

Advantageously the saccharide alcohol fatty acid tetraester is a C14 to C22 fatty acid ester. Preferably the tetraester is a PEG-20 to 40 derivative, more preferably the fatty acid ester is C16 to C20.

In a preferred embodiment the tetraester is in the concentration range of 5 to 15 % by wt.; preferably with a minimum of 7.5 % and a maximum of 12.5% and the triester is in the concentration range of 2 to 10 % by wt.; preferably with a minimum of 4 % and a maximum of 7.5%. In a further preferred embodiment the polyhydric alcohol fatty acid triester includes PEG-20 glyceryl triisostearate and the saccharide alcohol fatty acid tetraester includes sorbeth-30 tetraisostearate. Most preferably at least 50, 60, 70, 80, or 90 % by wt. of the total polyhydric alcohol fatty acid triester is PEG-20 glyceryl triisostearate. Most
preferably at least 50, 60, 70, 80, or 90 % by wt. of the total saccharide alcohol fatty acid tetraester(s) is sorbeth-30 tetraisostearate.

In another aspect of the invention is a method for removing makeup from the skin, including but not limited to the steps of:

a. applying to the skin a composition including
   i. 5 to 40 % by wt. of total liquid polyethylene glycol C14 to C22 fatty acid esters having a mixed IOB value in the range of 0.60 to 1.15;
   ii. wherein at least one of the polyethylene glycol fatty acid esters is a non-saccharide polyhydric alcohol fatty acid triester and a second of the polyethylene glycol fatty acid esters is a saccharide alcohol fatty acid tetraester;
   iii. wherein the triester and tetraester is present in the ratio range of 1.0 to 3.0;
   iv. 30 to 70 % by wt. of liquid oil; and
   v. a maximum water content of 5 % by wt.

b. allowing the composition to remain on the skin for a time effective to loosen, solublize and/or disperse the makeup ingredients; and

c. rinsing the composition from the skin with water.

Preferably the inventive method further includes the step of removing the makeup under moist conditions. Most preferably, the moist conditions include one or more of conditions selected from use of wet hands, use in the shower or use in the bath and the like.
IOB value:

The term "IOB (inorganic/organic balance)" as used herein means an index which indicates a hydrophilicity-hydrophobicity balance, and in the present invention, is calculated as \( \text{IOB} = \frac{\text{inorganic value}}{\text{organic value}} \). Incidentally, an inorganic value and an organic value can be determined based on Organic Conceptional Diagram (FUJITA, Makoto: "Prediction of Organic Compounds and Organic Conceptional Diagram", Kagaku no Ryoiki (Fields of Chemistry), 11(10), 719-725 (1957)).

In the present invention, it is important to control the IOB of the mixture of the PEG fatty acid ester ingredients. The Mixed IOB can preferably be in a range of from 0.6 to 1.15, with a range of from 0.75 to 1.0 being more preferred. If the mixed IOB is lower than 0.6, the water rinsability deteriorates showing sliminess. Therefore, a mixed IOB lower than 0.6 is not preferred. If the mixed IOB exceeds 1.15, phase separation or turbidity is seen so that the external appearance and makeup removal efficiency deteriorates, therefore, a mixed IOB higher than 1.15 is not preferred.

An appropriate mixed IOB can be determined by adjusting the proportions of the PEG fatty acid ester ingredients or other surfactants such that the overall system does not get turbid at about 30° C. By conducting a calculation based on the specific IOBs and proportions of the individual ingredients at the thus-selected mixing ratio using the
following equation where a, b, c refer to the individual PEG fatty acid ester ingredients or other surfactants a, b, and c (the equation can be used for more complex surfactant blends via extension in an analogous manner):

\[
\text{Mixed IOB} = \left( \frac{\text{IQB}(a) \times \text{wt.} \% \text{ of } a + \text{IQB}(b) \times \text{wt.} \% \text{ of } b + \text{IQB}(c) \times \text{wt.} \% \text{ of } c}{\text{wt.} \% \text{ of } a + \text{wt.} \% \text{ of } b + \text{wt.} \% \text{ of } c} \right)
\]

Composition:

Polyols will preferably be present in compositions of this invention. These polyols may be monomeric or polymeric. Monomeric polyols may have from 1 to 20 carbon atoms and from 2 to 10 hydroxyls. Illustrative monomeric polyols include glycerine, propylene glycol; glycerol; 1,4-butane diol; 1,3-butane diol; 1,2-butane diol; 1,6-hexanediol, 1,2-hexane diol; 3-methyl-1, 3-butane diol; 2-methyl-1, 3-propane diol, sorbitol and mixtures thereof.

Polymeric polyols are illustrated by polypropylene glycol, polyethylene glycol, dipropylene glycol, diglycerol, polyglycerol, trimethylene glycol, dipentaerythritol and combinations thereof. Particularly preferred are dipropylene glycol and polyethylene glycol, the latter having molecular weight ranging from about 200 to about 5000, preferably from about 300 to about 1000.

Amounts of polyol may range each from about 0.5 to about 20%, preferably from about 1 to about 15%, and optimally from about 2 to about 10% by weight of the composition.
An important component of the present invention is that of a triisostearate ester of glycerol. Advantageously this ester will be an alkoxylated ester including from 1 to about 50, preferably from about 5 to about 40, more preferably from about 15 to about 30, and optimally about 20 moles alkoxylate monomer per glycerol. The alkoxylate monomers ordinarily are C2-C5 alkyl diols. These include ethylene glycol, propylene glycol, butylene glycol and mixtures thereof. The mixtures may be random or block copolymers. Merely for illustrative purposes suitable esters include POE-20 glyceryl triisostearate; POE-15 glyceryl triisostearate; POE-10 glyceryl triisostearate; POE-5 glyceryl triisostearate; POP-20 glyceryl triisostearate; POP-15 glyceryl triisostearate; POP-5 glyceryl triisostearate; POE-POP-10, 10-glyceryl triisostearate; POE-POP-5, 10-glyceryl triisostearate and mixtures thereof. The term POE and POP are shorthand for polyoxyethylene and polyoxypropylene. For instance, POE, POP-10, 10-glyceryl triisostearate indicates 10 moles of ethylene oxide and 10 moles of polypropylene oxide polymerized into the glyceryl triisostearate ester. Most preferred for the present invention is POE-20 glyceryl triisostearate. This material is available under the trademark Uniox GT-20 IS sold by Nippon Oil & Fat Company.

Amounts of the triisostearate ester of glycerol for use in the present invention will preferably range from about 0.5 to about 30%, preferably from about 2 to about 20%, optimally from about 5 to about 15% by weight of the composition.
Another important component of the present invention is that of a saccharide alcohol fatty acid tetraester. Advantageously this ester will be an alkoxylated ester including from 1 to about 50, preferably from about 5 to about 40, more preferably from about 15 to about 30, and optimally about 20 moles alkoxylate monomer per saccharide alcohol. The alkoxylate monomers ordinarily are C2-C5 alkyl diols. These include ethylene glycol, propylene glycol, butylene glycol and mixtures thereof. The mixtures may be random or block copolymers. Merely for illustrative purposes, suitable esters include Sorbeth-4 Tetraoleate, Sorbeth-6 Tetraoleate, Sorbeth-30 Tetraoleate, Sorbeth-40 Tetraoleate, Sorbeth-60 Tetraoleate, Sorbeth-60 Tetrastearate, Sorbeth-20 Tetraisostearate, Sorbeth-30 Tetraisostearate, Sorbeth-40 Tetraisostearate, Sorbeth-50 Tetraisostearate and the like. Most preferred for the present invention is sorbeth-30 tetraisostearate. This material is available under the trademark Uniox ST-30 IS sold by Nippon Oil & Fat Company.

Amounts of the saccharide alcohol fatty acid tetraester for use in the present invention will range from about 5 to about 15%, and preferably from about 7.5 to about 12.5% by weight of the composition.

A variety of nonionic and amphoteric emulsifiers may be employed as optional further components of the present invention. The nonionic emulsifiers ordinarily are based upon a hydrophobe unit such as a fatty alcohol or a fatty acid having from about 10 to about 22 carbon atoms, an alkyl phenol having from about 6 to about 12 carbon atoms in the
alkyl chain, sorbitan and mixtures thereof. These hydrophobes ordinarily will be condensed with a hydrophilic unit, particularly from 1 to about 50, preferably from about 10 to about 30 moles of ethylene oxide, propylene oxide, butylene oxide or mixtures thereof. Illustrative materials are POE-20 sorbitan monolaurate; POE-20 cetyl ether; POE-7 glyceryl cocoate; POE-15 stearyl ether; POE-10 stearyl ether; POE-15 palmityl ether and combinations thereof. Other useful nonionics are alkyl polyglycosides such as decyl polyglucose available from the Henkel Corporation. Another class of nonionic emulsifiers are the long chain tertiary amine oxides. Examples include dimethyldodecylamine oxide, dimethylhexadecylamine oxide; di (2-hydroxy) tetradecylamine oxide, dimethyldecylamine oxide and combinations thereof.

Amphoteric emulsifiers such as betaines and sultaines may also be employed. Suitable examples include cocoamidopropyl betaine, cocoamido sultaine, dodecyldimethyl betaine, cetyldimethyl betaine and combinations thereof.

Amounts of the nonionic or amphoteric emulsifiers may range each from about 0.1 to about 10%, preferably from about 0.2 to about 5%, optimally from about 0.3 to about 2% by weight of the composition.

Skin benefit agents may also be included in the compositions. One category are the fatty acid esters, acidss and alcohols having from 10 to 22 carbon atoms. Suitable examples include stearyl alcohol, cetyl alcohol, isostearyl alcohol, lauryl
alcohol, myristyl alcohol, palmityl alcohol, oleyl alcohol, behenyl alcohol and/or acids and mixtures thereof. The fatty acid esters are represented by C2 to C6 linear and branched alkyl esters of stearic acid, isostearic acid, lauric acid, myristic acid, (palmitic acid), oleic acid and behenic acid. Illustrative materials are isotridecyl isononanoate, tri (2-ethylhexanoate), isopropyl myristate, isostearyl isostearate, capric/caprylic triglycerides, and combinations thereof. Vegetable derived esters useful for the invention include sunflowerseed oil, safflower oil, cottonseed oil, soybean oil, rice bran oil, sterols and combinations thereof.

Amounts of these materials may range from about 0.1 to about 30%, preferably from about 0.5 to about 25%, optimally from about 2 to about 20% by weight of the composition.

Anionic emulsifiers generally will not be included in compositions of this invention. These compositions are not intended to be foaming. Consequently any amount of anionic emulsifier present will range from 0 to 5%, preferably from 0 to 2%, more preferably from 0 to 1%, and optimally present at less than 0.05 or 0.01% by weight of the composition.

The oily phase of emulsion compositions according to the present invention can contain natural and synthetic esters as discussed above, hydrocarbons and silicone oils. Amounts of each of these materials when present may range from about 20 to about 80%, preferably from about 25 to about 75%,
optimally from about 30 to about 70% by weight of the composition.

Silicone oils may be of the volatile or non-volatile variety. Volatile silicone oils normally are cyclic or linear polydimethyl siloxanes containing from 3 to 9, preferably from 4 to 5 silicone atoms. The linear types are known by the CTFA name of dimethicone while the cyclic types are known as cyclomethicones. The latter are commercially available from the Dow Corning Corporation under the trademarks DC 244, DC 245, DC 344 and DC 345. In Japan they are available from Dow Corning Toray under the trademark SH-245.

Non-volatile silicone oils are exemplified by polyalkyl siloxanes, polyalkyl aryl siloxanes and polyether siloxane copolymers. Examples of polydimethyl siloxane are commercially available from Dow Corning under the DC 200 series. The polyalkyl siloxanes are available from the General Electric Company under trademarks such as SF 1075 methylphenyl fluid. Useful polyether siloxane copolymers are available from the General Electric Company under the SF-1066 trademark.

Hydrocarbons suitable for the present invention include mineral oil, isoparaffins and poly alpha-olef ins (such as those available under the trademark Permethyl 99A or 101), and polyisobutenes.
Often compositions of this invention will require thickeners or viscosifiers. These materials may be present in amounts from about 0.001 to about 10%, preferably from about 0.01 to about 5%, optimally from about 0.1 to about 0.5% by weight. Illustrative materials are gums such as xanthan, carrageenan, guar, pectin, sodium carboxymethyl cellulose, hydroxyalkyl and alkyl celluloses, and any combinations thereof. Polymeric type thickeners useful may include cross-linked acrylic or methacrylic acid polymers such as those sold by Noveon under the Carbopol trademark. Combination emulsifier/thickeners may also be utilized and are exemplified by materials such as Pemulen TR2®.

In certain instances, compositions of the invention may require opacifiers and/or pearlizers. Particularly useful for this purpose is ethylene glycol distearate, titanium dioxide, mica coated with titanium dioxide (e.g. Timiron®), lattices such as styrene/acrylate copolymers (e.g. Acusol® OP301) and mixtures thereof.

Preservatives will usually also be incorporated into the formulations. Representative materials include phenoxyethanol, methylparaben, propylparaben, ethylenediamine tetraacetate (EDTA) salts, benzyl alcohol, Iodopropynyl butyl carbamate, DMDM Hydantoin and combinations thereof. Amounts of these materials may range anywhere from about 0.0001 to about 1% by weight of the composition.
Optional minor components may include colorants, fragrances, promotional ingredients, each in their effective amounts to accomplish their respective functions. Typical promotional ingredients include vitamins such as retinyl palmitate, tocopherol acetate and niacinamide. Other promotionals include conjugated linoleic acid, ceramides, pentapeptides and combinations thereof. Exfoliants may also be used including e.g. Silica, and Polyethylene powder.

The invention will now be described in greater detail by way of the following non-limiting examples. The examples are for illustrative purposes only and not intended to limit the invention in any way. Physical test methods are described below:

Except in the operating and comparative examples, or where otherwise explicitly indicated, all numbers in this description indicating amounts or ratios of materials or conditions of reaction, physical properties of materials and/or use are to be understood as modified by the word "about".

Where used in the specification, the term "comprising" is intended to include the presence of stated features, integers, steps, components, but not to preclude the presence or addition of one or more features, integers, steps, components or groups thereof.
All percentages in the specification and examples are intended to be by weight unless stated otherwise.

Example 1.

A series of inventive (A through D) and corresponding comparative examples (Al through D1) were made according to Tables 1 and 2 respectively using the procedure below in order to evaluate efficacy of make-up removal among a series of blends of non-saccharide polyhydric alcohol fatty acid triester(s) and saccharide alcohol fatty acid tetraester(s) in a specific ratio in a water in oil emulsion. The methodology of the Makeup Removal (MUR) test involved the following procedures. Bio Skin Plate (ex. BEAULAX, Co. Ltd., Tokyo, Japan) samples were cut into 3 by 4 cm pieces. Base color for each of the pieces were measured in duplicate with a Minolta Spectrophotometer CM-2002. Lipstick in the amount of 0.0080 g was applied as a 3 cm diameter circle to each piece of Bio Skin Plate sample. After 5 minutes, the color of the lipstick was measured by the spectrophotomer followed by a water rinse. Next 0.2 ml of test sample solution was applied to the lipstick circle. The sample piece was then rubbed counter-clockwise 10 times, followed by counter-clockwise rubbing 10 times using a finger. Tap water at circa 37°C was used for a 30 second rinse. Color of the lipstick stain was then re-measured after a five time rinse. The measurement was then converted to a percentage of color change. An average of three replicates were utilized. The test formulas and results are reported in the Tables below.
Table 1 Examples of Inventive Formulas

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Formula A (inventive)</th>
<th>Formula B (inventive)</th>
<th>Formula C (inventive)</th>
<th>Formula D (inventive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>Up to 100</td>
<td>Up to 100</td>
<td>Up to 100</td>
<td>Up to 100</td>
</tr>
<tr>
<td>Trioctanoin</td>
<td>7.50</td>
<td>15.00</td>
<td>10.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Isopropyl Myristate</td>
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<td>5.00</td>
<td>10.00</td>
<td>-</td>
</tr>
<tr>
<td>Cyclomethicone</td>
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<td>-</td>
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<tr>
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<td>Phase B</td>
<td></td>
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<tr>
<td>PEG-20 Glyceryl Triisostearate</td>
<td>11.00</td>
<td>10.00</td>
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<tr>
<td>Sorbeth-30 Tetraisostearate</td>
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<tr>
<td>Sorbitan Isostearate</td>
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<td>0.75</td>
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<td>1.50</td>
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<tr>
<td>PEG-20 Hydrogenated Castor Oil Isostearate</td>
<td>1.50</td>
<td>0.75</td>
<td>1.25</td>
<td>1.50</td>
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<tr>
<td>Phase C</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Methylgluceth-10</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
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<tr>
<td>Deionized Water</td>
<td>0.096</td>
<td>1.5</td>
<td>-</td>
<td>1.5</td>
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<tr>
<td>Test Results</td>
<td></td>
<td></td>
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<tr>
<td>Makeup Removability (%)</td>
<td>74.53</td>
<td>72.12</td>
<td>78.47</td>
<td>72.39</td>
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Table 2 Examples of Comparative Formulas

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<th>Ingredient</th>
<th>Formula A (comparative)</th>
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<th>Formula C (comparative)</th>
<th>Formula D (comparative)</th>
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</thead>
<tbody>
<tr>
<td>Phase A</td>
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<td></td>
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<td></td>
</tr>
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<td>10.00</td>
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<td>Cyclomethicone</td>
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<td>Phase B</td>
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<td>PEG-20 Glyceryl Triisostearate</td>
<td>16.00</td>
<td>15.00</td>
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<tr>
<td>Sorbeth-30 Tetraisostearate</td>
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<tr>
<td>Sorbitan Isostearate</td>
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<td>PEG-20 Hydrogenated Castor Oil Isostearate</td>
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<td>0.75</td>
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<td>Test Results</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makeup Removability (%)</td>
<td>65.75</td>
<td>59.55</td>
<td>60.94</td>
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Based on the results reported in Table 1 and 2, it is evident that greatest efficacy was for the inventive samples when compared to the corresponding comparative samples.

Procedure for the testing of examples illustrated in the tables:

The sample was prepared by mixing 10 g of each formula in Table 1 and 2 with 3 g of water, in which this test condition simulates the makeup removal condition with wet hands. The MUR test was described in the previous section.

Procedure for preparing the examples illustrated in the tables:

Formulas in Table 1 and 2 were prepared as follows:

The components were blended together to make up the oil phase indicated as Phase A in the Tables. Once the oil phase was well blended, then the surfactant phase indicated as Phase B in the Tables were added to the bulk. After mixing well, water and Methylgluceth-10 indicated as Phase C in the Tables were finally added to the bulk blend, with continued mixing until the bulk blend became homogeneous and clear.

The foregoing description and examples illustrate selected embodiments of the present invention. In light thereof variations and modifications will be suggested to one skilled in the art, all of which are within the scope and spirit of this invention.
CLAIMS:

1. A stable, substantially non-aqueous make-up remover personal care composition, comprising:

   a. 5 to 40 % by wt. of total liquid polyethylene glycol C14 to C22 fatty acid esters having a mixed IOB value in the range of 0.60 to 1.15;

   b. wherein at least one of the polyethylene glycol fatty acid esters is a non-saccharide polyhydric alcohol fatty acid triester and a second of the polyethylene glycol fatty acid esters is a saccharide alcohol fatty acid tetraester;

   c. wherein the triester and tetraester is present in the ratio range of 1.0 to 3.0;

   d. 30 to 70 % by wt. of liquid oil; and

   e. a maximum water content of 5 % by wt.

2. The composition of claim 1 wherein the polyhydric alcohol fatty acid triester is a glyceryl C14 to C22 fatty acid ester.

3. The composition of claim 2 where the ester is a PEG-10 to 30 derivative.

4. The composition of claim 3 where the fatty acid ester is C16 to C20.
5. The composition of claim 1 wherein the saccharide alcohol fatty acid tetraester is a C14 to C22 fatty acid ester.

6. The composition of claim 5 where the tetraester is a PEG-20 to 40 derivative.

7. The composition of claim 6 where the fatty acid ester is C16 to C20.

8. The composition of claim 5 where the tetraester is in the concentration range of 5 to 15 % by wt.

9. The composition of claim 4 where the triester is in the concentration range of 2 to 10 % by wt.

10. The composition of claim 1 wherein the polyhydric alcohol fatty acid triester is PEG-20 glyceryl triisostearate and the saccharide alcohol fatty acid tetraester is sorbeth-30 tetraisostearate.

11. A method for removing makeup from the skin, comprising the steps of:

   a. applying to the skin a composition as claimed in claim 1;

   b. allowing the composition to remain on the skin for a time effective to loosen, solublise and/or disperse the makeup ingredients; and

   c. rinsing the composition from the skin with water.
12. The method of claim 11 further comprising the step of removing the makeup under moist conditions.

13. The method of claim 12 wherein said moist conditions include one or more of conditions selected from use of wet hands, use in the shower or use in the bath.
INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2007/061590

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K8/39 A61K8/86 A61Q1/14

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A61K A61Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category
citation of document, with indication, where appropriate, of the relevant passages

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Derwent Publications Ltd., London, GB;
Class A96, AN 2004-297964
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abstract

X Further documents are listed in the continuation of box C.

Relevant to claim No.

1-13

Date of the actual completion of the international search
21 February 2008

Date of mailing of the international search report
07/03/2008

Authorized officer
Mitchel I , Gemma
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