According to an embodiment, the dispersing phase comprises a solvent chosen in the group consisting of glycerol, 1,4-butanediol, ethylene glycol and mixtures thereof.

Stabilizer

According to the invention, the stabilizer can be ionic or non-ionic.

According to the invention, the ionic stabilizer is chosen in the group consisting of gum Arabic, carboxymethyl cellulose, soy protein, sodium caseinate, gelatin, bovine serum albumin, sugar beet pectin, hydrolyzed soy protein, hydrolyzed sericin, Pseudocollagen, Biopolymer SA-N (INCI name : Hyaluronic Acid (and) Serum Albumen (and) Dextran Sulfate), Pentacare-NA PF (Hydrolyzed Wheat Gluten (and) Ceratonia Siliqua (Carob) Gum (and) Aqua (and) Sodium Dextran Sulfate (and) Bis-Hydroxyethyl Tromethamine (and) Phenoxyethanol (and) Ethylhexylglycerin), and mixtures thereof.

According to a preferred embodiment, the ionic stabilizer is chosen in the group consisting of gum Arabic, carboxymethyl cellulose, sodium caseinate, sugar beet pectin and mixtures thereof.

According to the invention, the non-ionic emulsifier is chosen in the group consisting of polyvinyl alcohol, modified polyvinyl alcohol, modified starch, modified cellulose, polysaccharides, and mixtures thereof.

According to a particular embodiment, the non-ionic emulsifier is chosen in the group consisting of polyvinyl alcohol, modified starch and mixtures thereof.

According to a particular embodiment, the stabilizer is chosen in the group consisting of gum Arabic, modified starch, polyvinyl alcohol, polyvinylpyrrolidone (PVP), carboxymethylcellulose (CMC), anionic polysaccharides, acrylamide copolymer, inorganic particles, protein such as soy protein, rice protein, whey protein, white egg albumin, sodium caseinate, gelatin, bovine serum albumin, hydrolyzed soy protein, hydrolyzed sericin, pseudocollagen, silk protein, sericin powder, and mixtures thereof.

According to any one of the above embodiments of the present invention, the emulsion comprises between about 0.1% and 5% w/w of at least a stabilizer, percentage being expressed on a w/w basis relative to the total weight of the dispersion as obtained after step c). In still another aspect of the invention, the emulsion comprises between about 0.1% and 2% w/w of at least a stabilizer. In still another aspect of the invention, the emulsion comprises between about 0.1% and 1% w/w of at least a stabilizer.

## CLAIMS

1- A process for the preparation of a poly(ester urea) based core-shell microcapsule slurry comprising the following steps:

a) dissolving at least one polyisocyanate having at least two isocyanate groups in a hydrophobic material, preferably a perfume, to form an oil phase;

b) preparing a dispersing phase comprising a stabilizer, wherein the dispersing phase is not miscible with the oil phase;

c) adding the oil phase obtained in step a) into the dispersing phase to form a two-phases dispersion;

d) performing a curing step to form core-shell microcapsules in the form of a slurry,

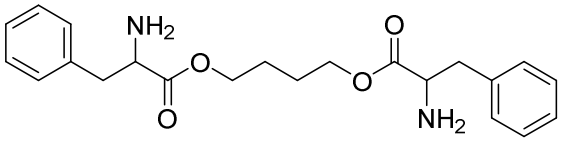
wherein a polyaminoester is added in step a) and/or in the two-phases dispersion of step c), and

wherein the polyaminoester is obtained by a reaction between a polyol and an amino-acid.

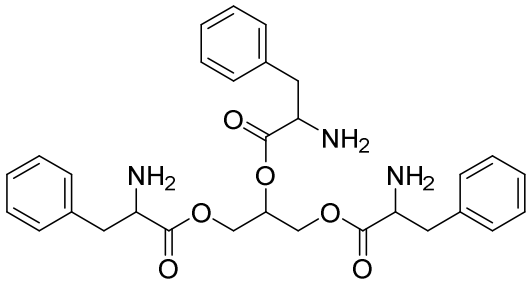
2. The process according to claim 1, wherein the polyol is chosen in the group consisting of glycerol, pentaerythritol, 1,1,1-tris(hydroxymethyl)ethane, 1,4-butanediol, diethylene glycol, and mixtures thereof.

3. The process according to claim 1, wherein the amino-acid is chosen in the group consisting of glycine, phenylalanine, alanine, valine, leucine, isoleucine and mixtures thereof, and mixtures thereof.

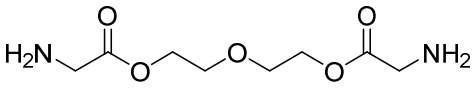
4. The process according to any one of the preceding claims, characterized in that the polyaminoester is selected from the group consisting of



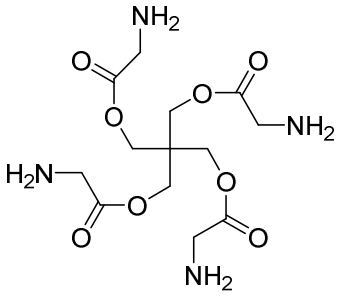
**1**



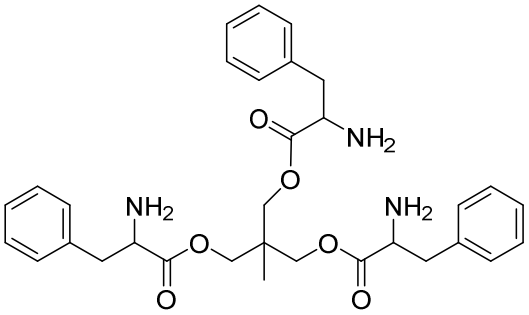
**2**



**3**



**4**



**5**

5. The process according to any one of the preceding claims, wherein the polyaminoester is used in an amount of between 0.1 and 15%, preferably between 4 and 12%, these percentages being defined by weight relative to the total weight of the slurry.

6. The process according to any one of the preceding claims, characterized in that the polyisocyanate is selected from the group consisting of a polyisocyanurate of toluene diisocyanate, a trimethylol propane-adduct of toluene diisocyanate and a trimethylol propane-adduct of xylylene diisocyanate, and mixtures thereof.

7. The process according to any one of the preceding claims, characterized in that the stabilizer is chosen in the group consisting of gum Arabic, modified starch, polyvinyl alcohol, polyvinylpyrrolidone (PVP), carboxymethylcellulose (CMC), anionic polysaccharides, acrylamide copolymer, inorganic particles, protein such as soy protein, rice protein, whey protein, white egg albumin, sodium caseinate, gelatin, bovine serum albumin, hydrolyzed soy protein, hydrolyzed sericin, pseudocollagen, silk protein, sericin powder, and mixtures thereof.

8. The process according to any one of the preceding claims, characterized in that the polyisocyanate is used an amount of between 1 to 15%, preferably from 2 to 8% and more preferably from 2 to 6% by weight of the microcapsule slurry.

9. The process according to any one of the preceding claims, characterized in that there is used an amount of between 20 and 50% of hydrophobic material, these percentages being defined by weight relative to the total weight of the microcapsule slurry.

10. The process according to any one of the preceding claims, characterized in that the hydrophobic material comprises a perfume.

11. A poly(ester urea) based core-shell microcapsule comprising:
- an oil-based core comprising a hydrophobic material, preferably comprising a perfume oil, and
- a shell comprising a reaction product between at least one polyisocyanate having at least two isocyanate groups and a polyaminoester,
wherein the polyaminoester is obtained by a reaction between a polyol and an amino-acid.

12. A perfuming composition comprising
(i) perfume microcapsule as defined in claim 11, wherein the hydrophobic material comprises a perfume,

(ii) at least one ingredient selected from the group consisting of a perfumery carrier, a perfumery co-ingredient and mixtures thereof, and

(iii) optionally at least one perfumery adjuvant.

13. A liquid perfumed consumer product comprising:

a) from 2 to 65% by weight, relative to the total weight of the consumer product, of at least one surfactant;

b) water or a water-miscible hydrophilic organic solvent; and

c) the microcapsule as defined in claim 11 or the perfuming composition as defined in claim 12.