CLAIMS

1- A process for preparing a polyamide core-shell microcapsule slurry comprising the following steps:

a) Dissolving at least one acyl chloride in a hydrophobic material, preferably a perfume to form an oil phase;

b) Dispersing the oil phase obtained in step a) into a water phase comprising a first amino compound to form an oil-in water emulsion;

c) Performing a curing step to form polyamide microcapsules in the form of a slurry;

wherein a stabilizer is added in the oil phase and/or in the water phase, and

wherein at least a second amino-compound is added in the water phase before the formation of the oil-in-water emulsion and/or in the oil-in water emulsion obtained after step b),

wherein the first amino-compound is an amino-acid, preferably chosen in the group consisting of L-Lysine, L-Arginine, L-Histidine, L-Tryptophane, L-Serin, L-Glutamine, L-Threonine and mixtures thereof, and

wherein the stabilizer is a protein.

2- The process according to claim 1, wherein it comprises the following steps:

a) Dissolving at least one acyl chloride in a hydrophobic material, preferably a perfume to form an oil phase;

b) Dispersing the oil phase obtained in step a) into a water phase comprising a first amino compound to form an oil-in water emulsion;

c) Adding to the oil-in-water emulsion obtained in step b) a second amino compound, and

d) Performing a curing step to form polyamide microcapsules in the form of a slurry;

wherein a stabilizer is added in the oil phase and/or in the water phase.

3- The process according to claim 1 or 2, wherein the acyl chloride is chosen in the group consisting of benzene-1,3,5-tricarbonyl chloride, benzene-1,2,4-tricarbonyl trichloride, benzene-1,2,4,5-tetracarbonyl tetrachloride, cyclohexane-1,3,5-tricarbonyl trichloride, isophthalyol dichloride, diglycolyl dichloride, succinic dichloride, and mixtures thereof.

4- The process according to any one of the preceding claims, wherein the first amino-compound is an amino-acid, preferably chosen in the group consisting of L-Lysine, L-Arginine, L-Histidine, L-Tryptophane, L-Serin, L-Glutamine, L-Threonine and mixtures thereof.

5- The process according to any one of claims 1 to 3, wherein the first amino compound is chosen in the group consisting of L-Lysine, L-Lysine ethyl ester, guanidine carbonate, chitosan, 3-aminopropyltriethoxysilane and mixtures thereof.

6- The process according to any one of the preceding claims, wherein the second amino compound is chosen in the group consisting of cystamine, cystamine hydrochloride, cystine, cystine hydrochloride, cystine dialkyl ester, cystine dialkyl ester hydrochloride, a xylylene diamine, 1,2-diaminocyclohexane, 1,4-diaminocyclohexane, L-lysine, L-Lysine ethyl ester, polyetheramines, ethylene diamine, diethylene triamine, spermine, spermidine, polyamidoamine (PAMAM), guanidine carbonate, chitosan, tris-(2-aminoethyl)amine, 3-aminopropyltriethoxysilane, L-arginine and mixtures thereof.

7- The process according to any one of the preceding claims, wherein the first amino compound and the second amino compound are different.

8- The process according to any one of the preceding claims, wherein the protein is chosen in the group consisting of 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.

9- The process according to any one of the preceding claims, wherein the molar ratio between the functional group NH2 of the second amino compound and the functional group COCl of the acyl chloride is comprised between 0.01 and 7.5.

10- The process according to any one of the preceding claims, wherein the weight ratio between acyl chloride and the hydrophobic material is comprised between 0.01 and 0.09.

11- A polyamide core-shell microcapsule slurry obtainable by the process as defined in any one of claims 1 to 10.

12- A polyamide core-shell microcapsule comprising:

- an oil based core comprising a hydrophobic material, preferably a perfume, and
- a polyamide shell comprising:
    - an acyl chloride, preferably in an amount comprised between 5 and 98%, preferably between 20 and 98%, more preferably between 30 and 85% w/w
    - a first amino compound, preferably in an amount comprised between 1% and 50% w/w, preferably between 7 and 40% w/w;
    - a second amino compound, preferably in an amount comprised between 1% and 50% w/w, preferably between 2 and 25% w/w;
    - a stabilizer, preferably a biopolymer, preferably between 0.1 and 75% w/w, more preferably between 1 and 70% w/w,

      wherein the first amino-compound is an amino-acid, preferably chosen in the group consisting of L-Lysine, L-Arginine, L-Histidine, L-Tryptophane, L-Serin, L-Glutamine, L-Threonine and mixtures thereof, and

      wherein the stabilizer is a protein.

13- The polyamide core-shell microcapsule according to claim 12, wherein the first amino compound and the second amino compound are different.

14. The polyamide core-shell microcapsule according to claim 12 or 13 comprising:

- an oil based core comprising a hydrophobic material, preferably a perfume, and
- a polyamide shell comprising:
    - an acyl chloride,

- a first amino-compound being an amino-acid, preferably chosen in the group consisting of L-Lysine, L-Arginine, L-Histidine, L-Tryptophane and mixtures thereof;
- a second amino compound chosen in the group consisting of ethylene diamine, diethylene triamine, cystamine and mixtures thereof, and
- a biopolymer chosen in the group consisting of casein, sodium caseinate, bovin serum albumin, whey protein, and mixtures thereof.

15- A perfuming composition comprising

(i) microcapsules as defined in any one of claims 12-14, wherein the hydrophobic material comprises a perfume,

(ii) At least one ingredient selected from the group consisting of a perfumery carrier and a perfumery base

(iii) Optionally at least one perfumery adjuvant.

16- A consumer product comprising:

- a personal care active base, and
- microcapsules as defined in any one of claims 12-14 or the perfuming composition as defined in claim 15

wherein the consumer product is in the form of a personal care composition.

17- A consumer product comprising:

- a home care or a fabric care active base, and
- microcapsules as defined in any one of claims 12-14 or the perfuming composition as defined in claim 15,

wherein the consumer product is in the form of a home care or a fabric care composition.