CLAIMS

1. A process for the preparation of a core-shell microcapsule slurry comprising the steps of:

1) admixing a hydrophobic active ingredient with at least one polyisocyanate having at least three isocyanate functional groups to form an oil phase;
2) dissolving an ionic emulsifier in water to form a water phase;
3) adding the oil phase to the water phase to form an oil-in-water dispersion, wherein the mean droplet size is greater than 500 microns;
4) applying conditions sufficient to induce interfacial polymerisation and form core-shell microcapsules in form of a slurry, wherein the shell consists of polymerised polyisocyanate having at least three isocyanate functional groups; and
5) optionally, drying the capsule slurry to obtain dried microcapsules;

characterized in that microcapsules are polyurea-based and wherein the process is performed in the absence of added amine or polyamine.

2. The process according to claim 1, wherein the mean droplet size of the oil-in-water dispersion is comprised between greater than 500 microns and less than 3000 microns.

3. The process according to claim 1 or 2, wherein the ionic emulsifier is chosen in the group consisting of gum Arabic, soy protein, sodium caseinate, gelatin, bovine serum albumin, sugar beet pectin, hydrolyzed soy protein, hydrolyzed sericin, Pseudocollagen, Biopolymer SA-N, Pentacare-NA PF, co-polymers of acrylamide and acrylic acid, acrylic co-polymers bearing a sulfonate group, co-polymers of vinyl ethers and maleic anhydride and mixtures thereof.

4. The process according to any one of the preceding claims, further comprising the step of adding a polymer selected from the group consisting of a non-ionic polysaccharide, a cationic polymer and mixtures thereof to form outer coatings to the microcapsules after step 4).

5. The process according to any one of the preceding claims, wherein the hydrophobic active ingredient represents between 20 to 50% by weight relative to the total weight of the dispersion.

6. The process according to any one of the preceding claims, wherein the emulsifier is used in an amount comprised between 0.1 and 5 wt% relative to the total weight of the dispersion.

7. The process according to any one of the preceding claims, wherein the hydrophobic active ingredient is chosen in the group consisting of a perfume, flavor, nutraceuticals, cosmetics, insect control agents, biocide actives and mixtures thereof, preferably a perfume or flavour.

8. A core-shell microcapsule slurry obtainable by the process as defined in any one of claim 1-7.

9. A polyurea-based core-shell microcapsule slurry comprising microcapsules having
a) an oil-based core comprising a hydrophobic active ingredient;
b) a polymeric shell formed by interfacial polymerisation and consisting of polymerised polyisocyanate formed from a polyisocyanate having at least three isocyanate functional groups in the presence of an ionic emulsifier; characterized in that microcapsules have a size greater than 500 microns.

10. A core-shell microcapsules powder obtained by drying the microcapsule slurry according to claim 8 or 9.

11. A perfuming composition comprising

(i) a microcapsules slurry as defined in claim 8 or 9 or a microcapsule powder as defined in claim 10, wherein the hydrophobic active ingredient comprises a perfume;

(ii) at least one ingredient selected from the group consisting of a perfumery carrier and a perfuming co-ingredient; and

(iii) optionally a perfumery adjuvant.

12. A liquid consumer product, preferably in the form of a laundry care product, a home care product, a body care product, a skin care product, an air care product, or a hygiene product, said 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) microcapsules as defined in claims 8 or 9 or a perfuming composition as defined in claim 11.

13. A powder consumer product, preferably in the form of a laundry care product, a home care product, a body care product, a skin care product, an air care product, or a hygiene product, said consumer product comprising

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

(b) microcapsules as defined in claim 10 or a perfuming composition as defined in claim 11.