

Claims

1. A composition comprising at least one core-shell microcapsule in a suspending medium, wherein said core-shell microcapsules comprise a core containing a functional ingredient and a shell comprising a polyurea resin formed by the reaction of at least one polyisocyanate and chitosan, wherein the chitosan is added to the reaction medium in solid form.
2. The composition according to claim 1, wherein the shell further comprise least one other polyamine that is different from chitosan, and/or at least one polyimine.
3. The composition according to any of the preceding claims, wherein the level of chitosan moieties in the polyurea resin is from 0.1 to 20 wt %, more particularly from 0.5 to 10 wt% and still more particularly from 0.8 to 5 wt% of moieties derived from chitosan, based on the total weight of the polyurea resin.
4. The composition according to any of the preceding claims, wherein the level of microcapsules in the composition is from 10 to 50 wt%, more particularly from 25 to 48 wt%, still more particularly from 35 to 45 wt% based on the total weight of the composition.
5. The composition according to any of the preceding claims, wherein the functional ingredient is hydrophobic and the core is in form of an oil phase.
6. The composition according to any of the preceding claims, wherein the functional ingredient is a perfume composition, a cosmetic ingredient, or a mixture thereof.
7. The composition according to any of the preceding claims, wherein the suspending medium is an aqueous phase.
8. The composition according to any of the preceding claims, wherein the suspending medium is a water-soluble matrix.

9. The composition according to any of the preceding claims, wherein the polyisocyanate is an aliphatic polyisocyanate.
10. The composition according to any of the preceding claims, wherein the polyisocyanate is selected from the group consisting of 1,6-diisocyanatohexane (CAS No. 822-06-0), 1,5-diisocyanato-2-methylpentane (CAS No. 34813-62-2), 1,4-diisocyanato-2,3-dimethylbutane, 2-ethyl-1,4-diisocyanatobutane, 1,5-diisocyanatopentane (CAS No. 4538-42-5), 1,4-diisocyanatobutane (CAS No. 4538-37-8), 1,3-diisocyanatopropane (CAS NO. 3753-93-3), 1,10-diisocyanatodecane (CAS No. 538-39-0), 1,2-diisocyanatocyclobutane, bis(4-isocyanatocyclohexyl)methane (CAS No. 5124-30-1, commercially available under the Trade Name DESMODUR® W), 3,3,5-trimethyl-5-isocyanatomethyl-1-isocyanatocyclohexane (CAS No. 4098-71-9), 2-Imidodicarbonic diamide (CAS No. 4035-89-6), biuret (CAS No. 108-19-0), aliphatic polyisocyanate based on hexamethylene diisocyanate and alkylene oxide, especially ethylene oxide, and mixtures thereof.
11. A process to obtain the composition according to all preceding claims, by performing the steps of:
- Forming an oil-in-water emulsion comprising an functional ingredient-containing core oil droplet dispersed in an aqueous phase; and
 - Reacting at least one polyisocyanate chitosan and, optionally, at least one polyamine that is different from chitosan and/or, optionally at least one polyimine, to form a polyurea core-shell microcapsules in around said droplet to form a core shell microcapsule, wherein chitosan is added before, during or after the addition of said optional polyamine or polyimine.
12. The process to obtain the composition according to claim 11, wherein chitosan is added in powder form to the reaction medium.
13. Use of chitosan to increase the imperviousness of polyurea microcapsule shells.

14. Use of a composition according to claims 1 to 10 in consumer products selected from the group consisting of detergents, cleansing composition, shampoo, conditioner, softener, liquid soap, soap bars, shower gel, deodorant, antiperspirant, or household surface cleaner.
- 5 15. Consumer products comprising a composition according to claim 1 to 10, wherein the consumer product is selected from the group consisting of detergents, cleansing composition, shampoo, conditioner, softener, liquid soap, soap bars, shower gel, deodorant, antiperspirant, or household surface cleaner.
- 10 16. Use of consumer products of claim 15 for the treatment of fabrics, skin, hair or household surfaces.