CLAIMS

1. Polymerically coated nanocapsules which contain microemulsions of water in liquid lipids and which comprise at least one hydrophilic active ingredient dissolved in the internal aqueous phase and wherein the polymeric coating is a complex coacervate, wherein said nanocapsules have an average particle size of 50 to 1000 nm, and wherein the droplets of the internal microemulsion have a size ranging between 0.1 and 80 nm.

2. Nanocapsules according to claim 1, wherein the liquid lipids are selected from the group formed by vegetable oils, soybean oil, sunflower oil, corn oil, olive oil, palm oil, cottonseed oil, colza oil, peanut oil, coconut oil, castor oil, linseed oil, borage oil, evening primrose oil, marine oils, fish oils, algae oils, oils derived from petroleum, mineral oil, liquid paraffin, vaseline, short-chain fatty alcohols, medium-chain aliphatic branched fatty alcohols, fatty acid esters with short-chain alcohols, isopropyl myristate, isopropyl palmitate, isopropyl stearate, dibutyl adipate, medium-chain triglycerides, capric and caprylic triglycerides, C_{12}-C_{16} octanoates, fatty alcohol ethers, dioctyl ether and/or mixtures thereof.

3. Nanocapsules according to claim 1, wherein the polymer of the coating is selected from the group formed by proteins, polysaccharides, polyesters, polyacrylates, polycyanoacrylates, copolymers and/or mixtures thereof.

4. Nanocapsules according to claim 3, wherein the polymer of the coating is selected from the group formed by gelatin, albumin, soy protein, pea protein, broad bean protein, potato protein, wheat protein, whey protein, β-lactoglobulin, caseinates, zein, alginates, carrageenans, pectins, gum arabic, xanthan gum, guar gum, chitosan, poly(L-lysine), dextran sulfate sodium, carboxymethyl galactomannan, carboxymethyl cellulose, cellulose nitrate, cellulose acetate phthalate, cellulose hydroxypropyl methyl phthalate, cellulose hydroxypropyl methyl acetate succinate, polyvinyl acetate phthalate and mixtures thereof.

5. Nanocapsules according to claim 1, wherein the polymer of the coating is a cationic polymer.