

Title (en)

MSSN DISPERSION AND METHOD FOR PRODUCING THE SAME

Title (de)

MSSN-DISPERSION UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

DISPERSION MSSN ET PROCEDE DE PRODUCTION DE LADITE DISPERSION

Publication

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Application

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Priority

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Abstract (en)

[origin: CA2519697A1] The invention relates to membrane-structured solid nanoparticles that have an average particle diameter ranging from 10 to 10000 nm, that are solid at 25 °C and that comprise a combination of active substance carrier particles and emulsifiers in such a manner that membranes penetrating the entire nanoparticles are formed so that emulsifiers are present in the interior and on the surface of the nanoparticles. The invention also relates to a method for producing an aqueous substance carrying dispersion in which solid active substance carrier particles on a wax, polymer or lipid basis having an average diameter ranging from 10 to 10000 nm are present. Said particles contain at least one pharmaceutical, cosmetic and/or food technological active substance. The dispersion is produced by a) mixing, at a temperature above the melting or softening point of the active substance carrier, the active substance comprising the active substance carrier on a wax, polymer or lipid basis with at least one emulsifier that leads in step b) to the formation of a lyotropic liquid-crystalline mixed phase and forming a phase B, b) mechanically mixing, at a temperature above the melting or softening point of the active substance carrier, phase B with an aqueous phase A that may contain an emulsifier, the weight ratio of phase B to phase A being 1:5 to 5:1, without using high-pressure homogenization, and forming a lyotropic liquid-crystalline mixed phase, c) diluting, to a desired final concentration of the dispersion, the mixed phase with an aqueous phase that may contain an emulsifier, at a temperature of the aqueous phase that is below the melting or softening point of the active substance carrier while stirring and without using high-pressure homogenization.

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