

Title (en)
HIGH PRESSURE EXTRACTION CAPSULE

Title (de)
HOCHDRUCKEXTRAKTIONSKAPSELN

Title (fr)
CAPSULES D'EXTRACTION SUR PRESSION ELEVEE

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Application
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Abstract (en)
[origin: WO2015022191A1] A high pressure extraction capsule (1) for single beverage preparation has a porous hydrophobic membrane (5, 10) that acts as a barrier to fluid flow up to a certain pressure and exceeding said pressure allows for extracting the fluid with active ingredients but still acts as a barrier to particles, particularly ground herbs or roots, wherein the pore size of the membrane (5, 10) is bigger than 0.45µm and wherein the hydrophobic membrane (5, 10) is arranged to have a surface tension of less than 40 dynes/cm. Preferably the hydrophobic membrane (5, 10) is arranged to have a surface tension of less than 40 dynes/cm, preferably approx. 30 dynes/cm and to have a pore size in the range from 0.45µm to 10µm, preferably from 0.45µm to 5µm. The capsule (1) comprises an inlet port (2), a compartment (3) for holding a substance with active ingredients like, e.g. ground herbs or roots, an outlet port (4) and a hydrophobic membrane (5, 10) that separates the compartment (3) from the outlet port (4). The hydrophobic membrane (5, 10) can be supported by a nonwoven or by support means of the capsule (1). According to another embodiment of the invention the capsule (1) comprises a first compartment (3) and a second compartment (8), wherein the inlet port (2) opens into the first compartment (3) and the second compartment (8) opens out into the outlet port (4), wherein a first membrane (9) separates the second compartment (8) from the outlet port (4), wherein the first compartment (3) is separated from the second compartment (8) by means of a second membrane (10), and wherein the second membrane (10) has a higher water resistance pressure than the first membrane.

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