

Title (en)

CAPSULE FOR BEVERAGE PREPARATION WITH INTEGRALLY FORMED SEALING MEMBER

Title (de)

KAPSEL ZUR HERSTELLUNG VON GETRÄNKEN MIT ANGEFORMTEM DICHUNGSELEMENT

Title (fr)

CAPSULE DESTINÉE À LA PRÉPARATION DE BOISSONS AVEC ÉLÉMENT D'ÉTANCHÉITÉ FORMÉ D'UN SEUL TENANT

Publication

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Application

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Abstract (en)

[origin: WO2020053075A1] The invention relates to a capsule (10) designed for preparing a beverage upon injection of liquid into the capsule by means of a beverage preparation machine (20), the capsule (10) having a longitudinal axis (y) and comprising a cup-shaped base body (1) being provided with a closed end (1a) and lateral sidewalls (1b) for holding beverage preparation ingredients and a flange-like rim (2) arranged at an open end (1c) of the base body (1) and radially ending with a curled outer edge (2c); in which - the capsule (10) is in a first state before being used in the beverage preparation machine, wherein the capsule further comprises a sealing member (3) for providing a fluid sealing engagement with a sealing profile of a capsule engagement member (21) of the beverage preparation machine (20), said sealing profile having at least one sealing surface (21a, 21b, 21c), wherein the base-body (1), the flange-like rim (2) and the sealing member (3) are made integrally from metallic material such as aluminum as a one piece element, and wherein the sealing member (3) comprises at least one dedicated surface (4) located at the junction between the sidewalls (1b) of the base body (1) and the flange-like rim (2), said dedicated surface (4) being in the form of at least one step extending over the flange-like rim (2), and in which - the capsule (10) is in a second state after being used in the beverage preparation machine. The capsule is characterized in that, in the second state, after engagement between the sealing profile of the capsule engagement member (21) and the at least one step of the dedicated surface (4), the at least one step is plastically deformed and the capsule (10) comprises, at the location of the at least one step (4), a flange-like rim (2) having a profile corresponding to the shape of at least one of the sealing surface (21a, 21b, 21c), said profile presenting at least three contiguous surfaces (S1, S2, S3) having each a different orientation.

IPC 8 full level

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