

Title (en)

High density disintegrating granulate for tablets; method for making it and its use

Title (de)

Verdichtetes Sprengmittelgranulat für gepresste Formkörper; dessen Herstellung und Verwendung

Title (fr)

Désintégrant granulaire de haute densité pour comprimé; méthode de préparation et son utilisation

Publication

**EP 1043391 A1 20001011 (DE)**

Application

**EP 99106370 A 19990329**

Priority

EP 99106370 A 19990329

Abstract (en)

In a densified disintegrant granulate for tablets, comprising (A) 60-99 wt.% water-insoluble, water-swellable cellulose and optionally other modified water-swellable polysaccharide derivatives, (B) 1-40 wt.% binder(s) selected from (meth)acrylic acid (co)polymers and their salts and (C) 0-7 wt. % liquid surfactant(s) forming a gel with water, the granulate has a moisture content of 2-8 wt.%. Independent claims are also included for: (i) an alternative form of the disintegrant granules (also having moisture content 2-8 wt.%), comprising (A) as above and 1-40 wt.% of at least one polymeric binder/surfactant; and (ii) the preparation of either for the granulate by forming a pre-mix of the components to be granulated then densifying the premix, where the premix is adjusted to moisture content of 10-80 wt.%, followed by drying to a moisture content of 2-8 wt.% after compacting and optionally obtaining the required granule size distribution by milling and screening.

Abstract (de)

Verdichtetes Granulat aus in Wasser quellbarer Cellulose und Cellulose- bzw. Stärkederivaten, Polymeren/Copolymeren von (Meth)acrylsäure oder Salzen derselben und gegebenenfalls ein oder mehreren flüssigen Tensiden mit einem Wassergehalt von 2 bis 8 Gew.% im Granulat und dessen Verwendung als Sprengmittel für Waschmitteltabletten, Reinigungsmitteltabletten, Wasserenthärtungstabletten und Fleckensalztabletten, sowie ein Verfahren zum Herstellen des verdichteten Granulats durch Mischen der Bestandteile, Granulieren und Verdichten.

IPC 1-7

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IPC 8 full level

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Citation (search report)

- [DA] WO 9855575 A1 19981210 - HENKEL KGAA [DE], et al
- [DA] WO 9840463 A1 19980917 - HENKEL KGAA [DE], et al
- [DA] WO 9840462 A1 19980917 - HERZOG STEFAN [DE], et al
- [A] DE 19722832 A1 19981203 - HENKEL KGAA [DE]
- [A] DE 19739384 A1 19990311 - HENKEL KGAA [DE]

Cited by

EP2108676A1; WO2009121926A1; EP2380960A1; EP1167433A1; EP1201743A1; US7199096B1; US7601678B2; WO0250234A1; WO0233036A1; WO0134756A1; WO2011133382A1; WO02059242A3; WO0159057A1; WO0233038A3; WO0242404A1; WO0242406A1; EP1228192A1; US8568564B2; EP1491621B2

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