

Title (en)
AEROSOL-GENERATING MATERIAL COMPRISING AN AMORPHOUS SOLID COMPRISING METHOL AND CALCIUM-CROSSLINKED ALGINATE

Title (de)
AEROSOL-ERZEUGENDES MATERIAL, DAS EINEN AMORPHEN FESTSTOFF ENTHÄLT, DER CALCIUMVERNETZTES ALGINAT UND MENTHOL UMFASST

Title (fr)
MATÉRIAU GÉNÉRATEUR D'AÉROSOL COMPRENANT UN SOLIDE AMORPHE COMPRENANT DE L'ALGINATE RÉTICULÉ AU CALCIUM ET DU MENTHOL

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Application
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Priority

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Abstract (en)
[origin: WO2021105465A1] The invention provides aerosol-generating material comprising an amorphous solid, the amorphous solid comprising: 0.1-80 wt% of menthol; 1-60 wt% of a gelling agent, the gelling agent comprising calcium-crosslinked alginate which comprises α -(1-4)-linked L-guluronate (G) units; and 0.1-50 wt% of an aerosol-former material; wherein a molar ratio of Ca²⁺ cations to G units is from 0.2:1 to 1:1.

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- KUEN YONG LEE ET AL: "Alginate: Properties and biomedical applications", PROGRESS IN POLYMER SCIENCE, PERGAMON PRESS, OXFORD, GB, vol. 37, no. 1, 28 June 2011 (2011-06-28), pages 106 - 126, XP028334452, ISSN: 0079-6700, [retrieved on 20110705], DOI: 10.1016/J.PROGPOLYMSCI.2011.06.003
- BRUCHET MARION ET AL: "Fabrication of patterned calcium cross-linked alginate hydrogel films and coatings through reductive cation exchange", CARBOHYDRATE POLYMERS, APPLIED SCIENCE PUBLISHERS, LTD BARKING, GB, vol. 131, 27 May 2015 (2015-05-27), pages 57 - 64, XP029252724, ISSN: 0144-8617, DOI: 10.1016/J.CARBPOL.2015.05.021
- SIKORSKI PAWEŁ ET AL: "Evidence for Egg-Box-Compatible Interactions in Calcium?Alginate Gels from Fiber X-ray Diffraction", BIOMACROMOLECULES, vol. 8, no. 7, 1 July 2007 (2007-07-01), US, pages 2098 - 2103, XP055837847, ISSN: 1525-7797, Retrieved from the Internet <URL:https://pubs.acs.org/doi/pdf/10.1021/bm0701503> DOI: 10.1021/bm0701503
- GRANT G T ET AL: "Biological interactions between polysaccharides and divalent cations: The egg-box model", FEBS LETTERS, ELSEVIER, AMSTERDAM, NL, vol. 32, no. 1, 15 May 1973 (1973-05-15), pages 195 - 198, XP027202259, ISSN: 0014-5793, [retrieved on 19730515]

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