

Title (en)

METHOD FOR PRODUCING GRANULATED OR POWDERY DETERGENT COMPOUNDS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON GRANULÄREN ODER PULVERFÖRMIGEN WASCHMITTELZUSAMMENSETZUNGEN

Title (fr)

PROCEDE DE PRODUCTION DE COMPOSITIONS DETERGENTES GRANULAIRES OU PULVERULENTES

Publication

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Application

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Abstract (en)

[origin: US2007238637A1] The present invention relates to a process for preparing granular or pulverulent detergent compositions, comprising the preparation of a detergent base powder by drying an aqueous detergent slurry, which comprises adding to the slurry a copolymer which is obtainable by free-radical copolymerization of (A) from 50 to 99.5 mol % of a monoethylenically unsaturated monocarboxylic acid and/or a salt thereof, (B) from 0.5 to 20 mol % of an alkoxyated monoethylenically unsaturated monomer I in which the variables are defined as follows: R<sup>1</sup> is hydrogen or methyl; R<sup>2</sup> is -(CH<sub>2</sub>)<sub>x</sub>-O-, -CH<sub>2</sub>-NR<sup>5</sup>-, -CH<sub>2</sub>-O-CH<sub>2</sub>-CR<sup>6</sup>-R<sup>7</sup>-CH<sub>2</sub>-O- or -CONH-; R<sup>3</sup> are each identical or different C<sub>2</sub>-C<sub>4</sub>-alkylene radicals which may be arranged blockwise or randomly, the proportion of ethylene radicals being at least 50 mol %; R<sup>4</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, -SO<sub>3</sub>-M or -PO<sub>3</sub>-M<sub>2</sub>; R<sup>5</sup> is hydrogen or -CH<sub>2</sub>-CR<sup>1</sup>-CH<sub>2</sub>; R<sup>6</sup> is -O-[R<sup>3</sup>-O]<sub>n</sub>-R<sup>4</sup>, where the -[R<sup>3</sup>-O]<sub>n</sub>- radicals may be different from the further -[R<sup>3</sup>-O]<sub>n</sub>- radicals present in formula I; R<sup>7</sup> is hydrogen or ethyl; M is alkali metal or hydrogen; n is from 4 to 250; x is 0 or 1, (C) from 0 to 50 mol % of a monoethylenically unsaturated dicarboxylic acid, of an anhydride and/or of a salt thereof and (D) from 0 to 20 mol % of a further copolymerizable monoethylenically unsaturated monomer and has an average molecular weight M<sub>w</sub> of from 30 000 to 500 000 g/mol and a K value of from 40 to 150 (measured at pH 7 in 1% by weight aqueous solution at 25° C.).

IPC 8 full level

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