

Title (en)

PREPARATION OF A QUATERNARY AMMONIUM HYDROXIDE AND USE THEREOF FOR THE PREPARATION OF Q QUATERNARY AMMONIUM SALT

Title (de)

HERSTELLUNG EINES QUATERNÄREN AMMONIUMHYDROXIDS UND DESSEN VERWENDUNG ZUR HERSTELLUNG EINES QUATERNÄREN AMMONIUMSALZES

Title (fr)

PRÉPARATION D'UN HYDROXYDE D'AMMONIUM QUATERNAIRE ET SON UTILISATION POUR LA PRÉPARATION D'UN SEL D'AMMONIUM QUATERNAIRE

Publication

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Application

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Abstract (en)

[origin: WO2006062406A2] The invention relates to a process for the preparation of a quaternary ammonium hydroxide, in particular denatonium hydroxide, and the use thereof for the preparation of a quaternary ammonium salt, in particular of denatonium benzoate or a denatonium fatty acid derivative. Due to its extremely bitter taste, this latter compound is applied in the art as an aversive agent, biocide, antifoulant and flavorant. It is usually prepared from a quaternary ammonium halide in an organic environment, which after isolation and purification is converted to a hygroscopic and unstable hydroxide intermediate, which in turn is immediately converted to the salt of interest in the solvent in which it is prepared. It is now found that these isolation steps can be avoided by performing the reaction at aqueous conditions. This is more straightforwardly and does not require costly precautions to avoid contact while handling. Moreover, the process of the invention allows to produce the quaternary ammonium salt from a lignocaine compound in a one-pot synthesis involving mostly water.

IPC 8 full level

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