

Title (en)

PREPARATION OF NEW ALDEHYDE AND/OR KETONE TRAPS AND FILTERS

Title (de)

HERSTELLUNG VON NEUEN ALDEHYD- UND/ODER KETONFALLEN UND -FILTERN

Title (fr)

PRÉPARATION DE NOUVEAUX CAPTEURS ET FILTRES D'ALDÉHYDES ET/ OU DE CÉTONES

Publication

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Application

EP 18765694 A 20180727

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Abstract (en)

[origin: WO2019020965A1] The invention relates to a method for preparing a nanoporous silica sol-gel matrix containing at least one amine reactant selected from hydroxylamine, methylhydroxylamine, tertbutylhydroxylamine, methoxyamine, tetraethylpentamine, dicarboxylic acid dihydrazides, particularly adipic acid dihydrazide, and the salts thereof, said method comprising the following steps: a) synthesising a gel from tetramethoxysilane or from a mixture of tetramethoxysilane and another organosilicon precursor selected from among phenyltrimethoxysilane, phenyltriethoxysilane, a fluoroalkyltrimethoxysilane, a fluoroalkyltriethoxysilane, a chloroalkylmethoxysilane, a chloroalkylethoxysilane, an alkyltrimethoxysilane, an alkyltriethoxysilane, an aminopropyltriethoxysilane and the mixtures thereof, the synthesis being performed in an aqueous medium at a temperature ranging from 10 to 70 °C in the presence of at least one amine reactant selected from among hydroxylamine, methylhydroxylamine, tertbutylhydroxylamine, methoxyamine, dicarboxylic acid dihydrazides, particularly adipic acid dihydrazide, and the salts thereof; b) drying the gel obtained during step a) so as to obtain a sol-gel matrix containing at least one amine reactant.

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