

Title (en)

HYDROPHOBIC SILICA GELS WITH REDUCED SURFACE AREA

Title (de)

HYDROPHOBE KIESLSÄUREGELE MIT REDUZIERTER SPEZIFISCHER OBERFLÄCHE

Title (fr)

GELS DE SILICE HYDROPHOBES PRESENTANT UNE ZONE SUPERFICIELLE LIMITEE

Publication

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Application

**EP 98908610 A 19980218**

Priority

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Abstract (en)

[origin: WO9837020A1] The present invention is hydrophobic silica gels having reduced surface area and a method for their preparation. The method comprises three steps, where in the first step a mixture comprising a silica hydrosol and colloidal silica is formed. In the second step the mixture is heat treated in the presence of a strong mineral acid at a pH less than about 1 to form a silica hydrogel having incorporated therein colloidal silica. In the third step the silica hydrogel is contacted with an organosilicon compound in the presence of a catalytic amount of a strong acid to effect hydrophobing of the silica hydrogel thereby forming a hydrophobic silica gel having a surface area within a range of about 100 m<sup>2</sup>/g to 450 m<sup>2</sup>/g as measured in the dry state. In a preferred method the hydrophobic silica gel is contacted with a sufficient quantity of an organic solvent immiscible with water to convert the hydrophobic silica hydrogel into a hydrophobic silica organogel.

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