

Title (en)

INORGANIC ABSORBENT COMPOSITES, METHOD FOR THE PRODUCTION THEREOF AND USE OF THE SAME

Title (de)

ANORGANISCHE, CUCURBITURIL ENTHALTENDEN, ABSORBIERENDE KOMPOSITE, VERFAHREN ZUR HERSTELLUNG UND VERWENDUNG

Title (fr)

COMPOSITES ABSORBANTS INORGANIQUES, PROCEDE PERMETTANT DE LES PRODUIRE ET LEUR UTILISATION

Publication

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Application

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Abstract (en)

[origin: WO02096553A2] The invention relates to novel inorganic absorbent composites consisting of an open-pore, solid, inorganic matrix, comprising cucurbiturils of general formula (I) which are chemically linked in the matrix. Said cucurbiturils form a macrocycle having a cage structure, consisting of n repeating units, wherein n is a whole number 5, 6, 7 or 8, R represents hydrogen or C1-C5 alkyl, and X represents O, S or N. X and R can be the same or different. Said composites are produced by reacting cucurbituril with an inorganic matrix-forming agent, such as silica gel, at 15 to 90°C in a liquid medium. The inventive composites can be used as absorption materials and catalyst supports.

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