

Title (en)
SILICIC ACID MIXTURES AND USE THEREOF AS INSULATION MATERIAL

Title (de)
KIESELSÄURE-MISCHUNGEN UND IHRE VERWENDUNG ALS WÄRMEDÄMMMATERIAL

Title (fr)
MÉLANGES D'ACIDE SILICIQUE ET LEUR UTILISATION COMME MATÉRIAU D'ISOLATION THERMIQUE

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Application
EP 14758334 A 20140827

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Abstract (en)
[origin: WO2015039843A1] 1. The invention relates to silicic acid mixtures and use thereof as insulation material. 2.1 The problem to be solved by the invention was the providing of a cost-effective mixture based on silicic acid which can be used for insulation, wherein said mixture contains as small a volume as possible of chemically produced silicic acid and a high proportion of silicon-containing by-products or waste products, without substantially reducing the insulating properties. 2.2 This problem is solved by a mixture of silicic acid and more than 50 wt.-% silicon-containing ash, which contains no perlite, wherein the silicon-containing ash preferably comprises rice husk ash and silica fume. The invention further relates to a method for producing insulation material by producing the mixture according to the invention and introducing the mixture into a sleeve, wherein no sintering step occurs in the method. Mixtures of differing compositions were correspondingly processed into a vacuum insulation panel and the insulating properties were compared based on the measured thermal conductivity. 2.2 The mixture according to the invention can be used as an insulation material, in particular for housing insulation.

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See references of WO 2015039843A1

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CN 102877557 A 20130116 - QINGDAO CREEK NEW ENVIRONMENTAL PROT MATERIAL CO LTD

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