

Title (en)

METHOD FOR THE PRODUCTION OF ALKENYL HALOSILANES, AND REACTOR SUITED THEREFOR

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ALKENYLHALOGENSILANEN UND DAFÜR GEEIGNETER REAKTOR

Title (fr)

PROCÉDÉ DE PRÉPARATION D'HALOSILANES D'ALCÉNYLE ET RÉACTEUR À CET EFFET

Publication

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Application

EP 13726168 A 20130528

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Abstract (en)

[origin: WO2014016013A1] Described is a method for producing alkenyl halosilanes by reacting alkenyl halide selected from the group comprising vinyl halide, vinylidene halide, and allyl halide with halosilane selected from the group comprising monohalosilane, dihalosilane, and trihalosilane in the gas phase in a reactor comprising a reaction tube (1) that has an inlet (2) at one end and an outlet (3) at the other end, said reactor further comprising an annular-gap nozzle (4) that is mounted on the inlet (2), extends into the reaction tube (1), and has a central supply duct (5) for one reactant (7) and a supply duct (6), which surrounds the central supply duct (5), for the other reactant (8). In order to carry out said method, alkenyl halide is injected into the reaction tube (1) through the central supply duct (5), halosilane is injected therein through the surrounding supply duct (6), and both substances flow through the reaction tube (1) in the direction of the outlet (3). The described method allows alkenyl halosilanes to be produced at a high yield and with great selectivity. The amount of soot formed is significantly lower than in conventional reactors. The invention also relates to a reactor for carrying out gas-phase reactions, said reactor being characterized by at least the following elements: A) a reaction tube (1) that has B) an inlet (2) at one end, C) an outlet (3) at the other end, and D) an annular-gap nozzle (4) which includes a central supply duct (5) for one reactant (7) and a supply duct (6), which surrounds the central supply duct (5), for another reactant (8), said nozzle being mounted on the inlet (2) and extending into the reaction tube (1).

IPC 8 full level

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Citation (search report)

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