

Title (en)

METHOD FOR PRODUCING AN ARTICLE FOR USE IN THE FOUNDRY INDUSTRY, CORRESPONDING MOLD, CORE, FEED ELEMENT, OR MOLDING MATERIAL MIXTURE, AND DEVICES AND USES

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES ARTIKELS ZUR VERWENDUNG IN DER GIEßEREIINDUSTRIE, ENTSPRECHENDE FORM, KERN, SPEISERELEMENT ODER FORMSTOFFMISCHUNG SOWIE VORRICHTUNGEN UND VERWENDUNGEN

Title (fr)

PROCÉDÉ DE FABRICATION D'UN ARTICLE POUR UTILISATION DANS L'INDUSTRIE DE LA FONDERIE, MOULE, NOYAU, ÉLÉMENT D'ALIMENTATION OU MÉLANGE DE MATÉRIAUX DE MOULAGE CORRESPONDANTS, ET DISPOSITIFS ET UTILISATIONS

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Application

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Abstract (en)

[origin: WO2022013129A1] The invention relates to a method for producing an article for use in the foundry industry selected from the group consisting of molds, cores, feed elements, and molding material mixtures, having the following steps: (S1) producing or providing a binder system which comprises, as components in three spatially separate containers, one component (A), comprising particulate amorphous silicon dioxide, a first liquid component (B), comprising sodium silicate, and a second liquid component (C), comprising dissolved aluminate ions in an aqueous phase; and (S2) contacting a mold base material (D) and the contents of all of the aforementioned components (A), (B), and (C) of the binder system in specified quantity ratios in one or more steps such that a molding material mixture is produced in which the aluminate ions and the particulate amorphous silicon dioxide are entirely or partly mixed into the sodium silicate, wherein steps (S1) and (S2) are carried out in a system for producing molding material mixtures. The invention also relates to corresponding molding material mixtures as well as devices and uses.

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