Title (en)

AQUEOUS AKALINE BINDER COMPOSITION FOR CURING WITH CARBON DIOXIDE GAS AND USE THEREOF, A CORRESPONDING MOULDING MIXTURE FOR A PRODUCING FOUNDRY SHAPE, A CORRESPONDING FOUNDRY SHAPE AND A METHOD FOR PRODUCING A FOUNDRY SHAPE

Title (de)

WÄSSRIGE ALKALISCHE BINDEMITTELZUSAMMENSETZUNG ZUR AUSHÄRTUNG MIT KOHLENDIOXIDGAS SOWIE DEREN VERWENDUNG, EINE ENTSPRECHENDE FORMSTOFFMISCHUNG ZUR HERSTELLUNG EINES GIESSEREIFORMKÖRPERS, EIN ENTSPRECHENDER GIESSEREIFORMKÖRPER SOWIE EIN VERFAHREN ZUR HERSTELLUNG EINES GIESSEREIFORMKÖRPERS

Title (fr)

COMPOSITION ALCALINE AQUEUSE DE LIANT, À DURCIR AVEC DU DIOXYDE DE CARBONE, SON UTILISATION, MÉLANGE DE MATIÈRES À MOULER CORRESPONDANT POUR LA FABRICATION D'UN CORPS DE MOULE DE FONDERIE, CORPS DE MOULE DE FONDERIE CORRESPONDANT ET PROCÉDÉ DE FABRICATION D'UN CORPS MOULE DE FONDERIE

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Abstract (en)

[origin: WO2018002129A1] The invention relates to an aqueous alkaline binder composition for curing with carbon dioxide gas, comprising a phenol group with negatively charged or uncharged phenol-aldehyde resin which is selected from the group consisting of resols and mixtures comprising one or more resols and one or more novolaks, an oxyanion, selected from the group consisting of borate ions, aluminate ions, stannate ions, zirconate ions, titanium ions and mixtures thereof, for forming a stable complex with the resol phenol-aldehyde resin, wherein the total molar weight of the phenol group of the phenol-aldehyde resin in the aqueous alkaline binder composition is in the region of 1 - 3 mol/kg with respect to the total mass of the aqueous alkaline binder composition and wherein the phenol-aldehyde resin has an average molecular weight (mw) in the region of 750 - 1200g/mol, determined by the gel permeation chromatography. The invention also relates to a corresponding use, a moulding mixture for producing a foundry shape and to a corresponding method for producing a foundry shape and a corresponding foundry shape.

IPC 8 full level

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See references of WO 2018002129A1

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