

Title (en)
PROCESS FOR PRODUCING METHANATION CATALYST AND PROCESS FOR METHANATION OF SYNTHESIS GAS

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES METHANISIERUNGS-KATALYSATORS SOWIE EIN VERFAHREN ZUR METHANISIERUNG VON SYNTHESSEGAS

Title (fr)
PROCÉDÉ DE PRÉPARATION D'UN CATALYSEUR DE MÉTHANISATION ET PROCÉDÉ DE MÉTHANISATION D'UN GAZ DE SYNTHÈSE

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Abstract (en)
[origin: WO2013068931A1] The present invention relates to a process for producing a catalyst for carrying out methanation reactions. The production of the catalyst is based on contacting of a hydrotalcite-comprising starting material with a fusible metal salt. The compounds brought into contact with one another are intimately mixed, thermally treated so that the metal salt fraction melts and subsequently subjected to a low-temperature calcination step and a high-temperature calcination step. The metal salt melt comprises at least one metal selected from the group consisting of K, La, Fe, Co, Ni, Cu and Ce, preferably Ni. The metal salt melt more preferably comprises/contains nickel nitrate hexahydrate. The hydrotalcite-comprising starting material is preferably hydrotalcite or a hydrotalcite-like compound as starting material, and the hydrotalcite-comprising starting material preferably comprises magnesium and aluminum as metal species. The catalyst of the invention is preferably used for carrying out methanation reactions at elevated pressures (from 10 to 50 bar) and elevated temperatures.

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