

Title (en)

METHOD FOR PRODUCING CARBONYL DICHLORIDE FROM CHLORINE AND CARBON MONOXIDE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON CARBONYLDICHLORID AUS CHLOR UND KOHLENMONOXID

Title (fr)

PROCEDE DE PRODUCTION DE DICHLORURE DE CARBONYLE A PARTIR DE CHLORE ET DE MONOXYDE DE CARBONE

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Application

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Abstract (en)

[origin: DE19916856A1] Industrial methods for producing carbonyl dichloride consist of a two step process with reactors that are connected in series, an exact fine tuning of the reaction parameters and with a high degree of consistency with regard to reaction conditions. This results in a reaction being inefficiently carried out in instances of intermittent operation and decentralization. By altering the catalyst, ever higher operation temperatures are required thus having an adverse effect on the quality of the product. Bringing chlorine into contact with activated carbon can induce the formation of tetrachloromethane. Other catalysts should enable the synthesis of carbonyl dichloride in a manner which is scalable, technically simple and, to the greatest possible extent, free of by-products. The invention relates to a method for carrying out the scalable production of carbonyl dichloride from chlorine and carbon dioxide by reacting chlorine and carbon dioxide on a catalyst selected from the row of metal halogenides, whereby the reaction parameters that include pressure and temperature can be selected within a wide range, and the production of by-products is either diminished or prevented. The inventive method makes it possible to synthesize high quality carbonyl dichloride from chlorine and carbon monoxide in various orders of magnitude while using variable reaction parameters.

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