

Title (en)

A METHOD OF PREPARING CYCLOHEXANECARBOXYLIC ACID USING [2+4] DIELS-ALDER REACTION

Title (de)

VERFAHREN ZUR HERSTELLUNG VON CYCLOHEXANCARBONSÄURE MIT HILFE DER [2+4]-DIELS-ALDER-REAKTION

Title (fr)

PROCEDE DE PREPARATION D'ACIDE CYCLOHEXANECARBOXYLIQUE FAISANT APPEL A UNE REACTION [2+4] DIELS-ALDER

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Application

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Abstract (en)

[origin: WO0046174A1] Disclosed herein is a method of preparing cyclohexanecarboxylic acid in which 1,3-butadiene and acrylic acid are subjected to [2+4] Diels-Alder reaction to produce 3-cyclohexene-1-carboxylic acid which is then hydrogenated. The [2+4] Diels-Alder reaction is carried out at a temperature of room temperature to 200 DEG C in an aromatic hydrocarbon solvent, such as toluene or xylene. The hydrogenation is carried out at a temperature of room temperature to 150 DEG C under a hydrogen pressure of 10 psi to 150 psi in the presence of the platinum of palladium catalyst. The disclosed method is featured in that it enables the use of 1,3-butadiene as the raw material for fine chemicals, unlike the prior methods. Moreover, the method disclosed is advantageous in that the reaction can be carried out in a relatively simple and easy manner and also the reaction by-products can be conveniently treated after the reaction.

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No further relevant documents disclosed

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