

Title (en)
CATALYSTS FOR THE FORMATION OF ISOCYANURATES MADE FROM ISOCYANATES

Title (de)
KATALYSATOREN FÜR DIE HERSTELLUNG VON ISOCYANURATEN AUS ISOCYANATEN

Title (fr)
CATALYSEURS POUR LA PRODUCTION D'ISOCYANURATES À PARTIR D'ISOCYANATES

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Application
EP 15807926 A 20151210

Priority

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- EP 2015079254 W 20151210

Abstract (en)
[origin: WO2016092018A1] The invention relates to a method for producing isocyanurates and isocyanurate-containing polyurethanes, comprising the step of reacting an isocyanate in the presence of a catalyst. Said method is characterized in that the catalyst comprises the product of the reaction of a carboxylic acid containing thiol groups with an alkali-metal, alkaline-earth-metal, scandium-group, or lanthanoid base, wherein the reaction is performed in the absence of compounds containing tin and/or lead, wherein the degree of deprotonation of the catalyst is > 50% to ≤ 100% and the H atoms present in carboxyl groups, the carboxylate groups, the H atoms present in thiol groups, and the thiolate groups are also taken into account in the calculation of the degree of deprotonation. The catalyst is preferably a dipotassium salt of 2-mercaptoacetic acid, 3-mercaptopropionic acid, 4-mercaptobutyric acid, and/or thiosalicylic acid. Even at low temperatures, isocyanurates and/or isocyanurate units and in particular mixtures of isocyanurates and/or isocyanurate units and carbamates and/or urethane units, which are present in isocyanurate-containing polyurethanes (PUR/PIR systems), are obtained at a higher reaction speed than in the case of comparable methods in which catalysts that do not contain mercapto groups, such as potassium acetate, are used.

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