Title (en)

PUR/PIR RIGID FOAMS MADE OF POLYADDITION OLIGOESTERS

Title (de)

PUR-/PIR-HARTSCHÄUME AUS POLYADDITIONS-OLIGOESTERN

Title (fr)

MOUSSES DURES DE PUR/PIR À PARTIR D'OLIGOESTERS DE POLYADDITION

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Application

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Abstract (en)

[origin: WO2017089417A1] The invention relates to a method for producing PUR/PIR rigid foam materials, having the steps of reacting at least one polyester polyol (a), which can be obtained by reacting a.1.) at least one cyclic carboxylic acid anhydride; a.2.) at least one low-molecular diol with a molecular mass of 62 to 450 Da; and a.3.) at least one alkylene oxide; by esterifying the components a.1.) and a.2.) and subsequently oxalkylating the resulting carboxylic acid half-ester using component a.3.); wherein at least the oxalkylation is carried out using a.4.) at least one amine catalyst in which (the) nitrogen atom(s) is/are part of an aromatic ring system, with (b) at least one polyisocyanate-containing component, (c) at least one propellant, (d) at least one or more catalysts, (e) optionally at least one flameproofing agent and/or other auxiliary agents, and (f) optionally at least one additional compound with at least two groups which are reactive towards isocyanates and which differ from polyester polyol (a). The invention also relates to a PUR/PIR rigid foam material which can be obtained using a method according to the invention, to a composite element comprising the PUR/PIR rigid foam material according to the invention, at least one cover layer selected from concrete, wood, press board, aluminum, copper, steel, stainless steel, paper, non-wovens, and plastic, and multilayer composites or a combination thereof. The invention also relates to the use of the PUR/PIR rigid foam materials according to the invention or the composite element according to the invention for heat damping.

IPC 8 full level

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