

Title (en)
TWO-COMPONENT POLYURETHANE COMPOSITION WITH A HIGH DEGREE OF HYDROPHOBICITY AND ADJUSTABLE POT LIFE

Title (de)
ZWEIKOMPONENTIGE POLYURETHANZUSAMMENSETZUNG MIT HOHER HYDROPHOBIE UND EINSTELLBARER TOPFZEIT

Title (fr)
COMPOSITION DE POLYURÉTHANE À DEUX COMPOSANTS AYANT UN DEGRÉ ÉLEVÉ D'HYDROPHOBICITÉ ET UNE DURÉE DE VIE EN POT AJUSTABLE

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Application
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Abstract (en)
[origin: WO2021191045A1] The invention relates to a polyurethane composition consisting of a first component A and a second component B. The first component A comprises between 30 wt.% and 99 wt.%, based on component A, of a polyol mixture P, containing 100 wt.% of at least one hydrophobic polyol P1, 10 to 75 wt.% of at least one hydrophilic polyol P2, 0 to 25 wt.% of at least one diol P3 with two hydroxyl groups which are connected via a C2 to C9 carbon chain; and at least one compound T which has at least one thiol group; and the second component B comprises at least one polyisocyanate I; wherein at least one metal catalyst K is additionally contained in one of the two components for reacting hydroxyl groups and isocyanate groups, said metal catalyst being capable of forming thio complexes, and the molar ratio of all thiol groups of the at least one compound T to all of the metal atoms of the at least one metal catalyst K ranges between 1:1 and 250:1. Such a composition allows any setting of the cure time of the hydrophobic polyurethane composition within specific boundaries and allows long cure times with a very rapid subsequent curing of the composition to be achieved. The composition according to the invention is particularly suitable as a hydrophobic structural adhesive for adhering two components or as a matrix in composite materials.

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