

Title (en)

Process for the preparation of aqueous dispersions or solutions of polyurethanes, their use as coatings for flexible substrates.

Title (de)

Verfahren zur Herstellung von wässrigen Polyurethan-Dispersionen und -Lösungen und deren Verwendung zur Beschichtung von flexiblen Substraten.

Title (fr)

Procédé de préparation de dispersions ou de solutions aqueuses de polyuréthanes, leur application pour le revêtement de substrats flexibles.

Publication

EP 0000029 A1 19781220 (DE)

Application

EP 78100046 A 19780601

Priority

DE 2725589 A 19770607

Abstract (en)

[origin: ES470537A1] The present invention therefore relates to a process for the preparation of aqueous solutions or dispersions of polyurethane-polyureas by the reaction in the aqueous phase of prepolymers which contain chemically built-in hydrophilic groups and/or external emulsifiers which are not bound chemically as well as at least two free isocyanate groups with organic compounds containing at least two primary and/or secondary amino groups, characterized in that the isocyanate prepolymer which has been hydrophilically modified and/or contains an external emulsifier is mixed, in the absence of water, with compounds containing at the most one free primary or secondary amino group and at least one blocked group which releases a free primary or secondary amino group in the presence of water and a total of at least two at least partially blocked primary and/or secondary amino groups, and the mixture is subsequently mixed with water. The invention also relates to the dispersions or solutions obtained by this process and to their use for coating flexible and rigid substrates.

Abstract (de)

Die vorliegende Erfindung betrifft ein neues Verfahren zur Herstellung von wäßrigen Lösungen oder Dispersionen von Polyurethan-Polyharnstoffen, bei welchem man eingebaute hydrophile Gruppierungen und/oder externe Emulgatoren enthaltende NCO-Präpolymere mit blockierten Di- oder Polyaminen, welche unter dem Einfluß von Wasser freie Di- oder Polyamine bilden, durchmischt, und man anschließend dieses Gemisch mit Wasser vermischt.

IPC 1-7

C08G 18/10; **C03C 25/00**; **C08G 18/32**; **D06M 15/52**

IPC 8 full level

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CPC (source: EP US)

C03C 25/00 (2013.01 - EP US); **C08G 18/0804** (2013.01 - EP US); **C08G 18/10** (2013.01 - EP US); **Y10T 428/31551** (2015.04 - EP US)

C-Set (source: EP US)

C08G 18/10 + **C08G 18/3256**

Citation (applicant)

D. DIETERICH ET AL., ANGEW. CHEM., vol. 82, 1970, pages 53

Citation (search report)

[A] GB 1064841 A 19670412 - ICI LTD

Cited by

EP1975187A1; EP0075775A1; EP0098752A3; EP0009760A1; EP0237997A1; US4748200A; EP0004069A1; US8324340B2; WO2008116927A1; EP0531249B2

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