

Title (en)

AQUEOUS POLYURETHANE DISPERSIONS WITH A SMALL CONTENT OF CYCLIC COMPOUNDS

Title (de)

WÄSSRIGE POLYURETHAN-DISPERSIONEN MIT GERINGEM GEHALT AN CYCLISCHEN VERBINDUNGEN

Title (fr)

DISPERSIONS DE POLYURETHANE AQUEUSES AYANT UNE TENEUR FAIBLE EN COMPOSES CYCLIQUES

Publication

EP 1851281 A1 20071107 (DE)

Application

EP 06708156 A 20060209

Priority

- EP 2006050812 W 20060209
- DE 102005006551 A 20050211

Abstract (en)

[origin: WO2006084881A1] The invention relates to aqueous dispersions containing a polyurethane and composed of: a) diisocyanates; b) diols, of which b₁ 10 to 100 mol %, (in relation to the total quantity of the diols in (b)) have a molecular weight of between 500 and 5000 and b₂ 0 to 90 mol %, (in relation to the total quantity of the diols in (b)) have a molecular weight of between 60 and 500 g/mol; c) monomers that differ from the monomers in (a) and (b) and that comprise at least one isocyanate group or at least one group that reacts with isocyanate groups, said monomers comprising in addition at least one hydrophilic group or a potential hydrophilic group, which induces the water dispersibility of the polyurethanes; d) optionally additional polyvalent compounds, which differ from the monomers in (a) to (c) and which comprise reactive groups, the latter being alcoholic hydroxyl groups, primary or secondary amino groups or isocyanate groups; and e) optionally monovalent compounds, which differ from the monomers in (a) to (d) and which comprise a reactive group, the latter being an alcoholic hydroxyl group, a primary or secondary amino group or an isocyanate group. Said dispersions are characterised in that the diols b₁ contain less than 0.5 parts by weight cyclic compounds for 100 parts by weight diols b₁).

IPC 8 full level

C09D 175/04 (2006.01); **C08G 18/08** (2006.01)

CPC (source: EP KR US)

C08G 18/0823 (2013.01 - EP US); **C08G 18/0866** (2013.01 - EP US); **C08G 18/42** (2013.01 - EP US); **C09D 175/00** (2013.01 - KR); **C09D 175/04** (2013.01 - EP KR US); **C09J 175/04** (2013.01 - EP US); **C08G 2290/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2006084881A1

Citation (examination)

EP 0579988 B1 19950308 - BAYER AG [DE]

Citation (third parties)

Third party :

- US 2004242765 A1 20041202 - MUNZMAY THOMAS [DE], et al
- K.H. BUCHEL: "Methoden der organischen chemie", 19 November 1987, GEORG THIEME VERLAG, STUTTGART NEW YORK, ISBN: 3-13-219004-7, article DIETER DIETERICH: "Poly(urethane) [Poly(carbamidsaure-ester)]", pages: 1561 - 1563, 1587, 1597-1599, XP003028386

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006084881 A1 20060817; BR PI0607955 A2 20101019; CN 101115811 A 20080130; DE 102005006551 A1 20060824; EP 1851281 A1 20071107; JP 2008530292 A 20080807; KR 20070104462 A 20071025; MX 2007009193 A 20070822; US 2008139741 A1 20080612

DOCDB simple family (application)

EP 2006050812 W 20060209; BR PI0607955 A 20060209; CN 200680004410 A 20060209; DE 102005006551 A 20050211; EP 06708156 A 20060209; JP 2007554558 A 20060209; KR 20077020654 A 20070910; MX 2007009193 A 20060209; US 81534006 A 20060209