

Title (en)

DISPERSANT COMPOSITIONS COMPRISING NOVEL EMULSIFIERS FOR WATER IN OIL EMULSIONS

Title (de)

SPRENGSTOFFZUSAMMENSETZUNGEN, UMFASSEND NEUARTIGE EMULGATOREN FÜR WASSER-IN-ÖL-EMULSIONEN

Title (fr)

COMPOSITIONS D'EXPLOSIFS, CONTENANT DE NOUVEAUX EMULSIFIANTS POUR EMULSIONS EAU DANS HUILE

Publication

EP 1299325 A1 20030409 (DE)

Application

EP 01957921 A 20010705

Priority

- DE 10032829 A 20000706
- EP 0107722 W 20010705

Abstract (en)

[origin: DE10032829A1] In an explosive composition comprising an emulsifier in a water-in-oil emulsion, the emulsifier is a Mannich adduct (I) of (a) a mono- or polycyclic mono- to penta-hydroxy-aromatic compound (II), mono-, di- or tri-substituted by 6-400C alk(en)yl(aryl), (b) formaldehyde or its oligomer or polymer and (c) a nitrogen compound such as an amine with primary or secondary amine function(s) and ammonia. In an explosive composition comprising an emulsifier in a water-in-oil emulsion, the emulsifier is a Mannich adduct (I) of (a) a hydrocarbyl-substituted hydroxyaromatic compound of formula (II), (b) formaldehyde or its oligomer or polymer and (c) a nitrogen (N) compound selected from an amine with primary or secondary amine function(s) and ammonia. (R1>)nAr(OH)x (II) R1>a hydrocarbyl group, selected from linear or branched 6-400 carbon (C) alkyl, 6-400C alkenyl, 6-400C alkenyl-aryl or 6-400C alkyl-aryl; Ar : a mono- or polycyclic, optionally substituted aromatic ring; n : 1, 2 or 3; x : 1-5. An independent claim is also included for the production of the explosive composition by dissolving (I) in an organic liquid forming the oil phase, warming this solution if necessary and emulsifying an optionally warmed aqueous phase containing an inorganic oxidant.

IPC 1-7

C06B 47/14

IPC 8 full level

C09K 23/16 (2022.01); **C06B 47/00** (2006.01); **C06B 47/14** (2006.01); **C09K 23/40** (2022.01); **C09K 23/52** (2022.01)

CPC (source: EP US)

C06B 47/145 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0202485 A1 20020110; AT E270260 T1 20040715; AU 2001279714 B2 20060824; AU 7971401 A 20020114; BR 0112162 A 20030513; CA 2414781 A1 20030103; CN 1178879 C 20041208; CN 1441755 A 20030910; DE 10032829 A1 20020117; DE 50102754 D1 20040805; EP 1299325 A1 20030409; EP 1299325 B1 20040630; ES 2223901 T3 20050301; JP 2004502628 A 20040129; MX PA02012637 A 20030425; TR 200402500 T4 20041221; US 2003145925 A1 20030807; US 6913660 B2 20050705; ZA 200300987 B 20040312

DOCDB simple family (application)

EP 0107722 W 20010705; AT 01957921 T 20010705; AU 2001279714 A 20010705; AU 7971401 A 20010705; BR 0112162 A 20010705; CA 2414781 A 20010705; CN 01811800 A 20010705; DE 10032829 A 20000706; DE 50102754 T 20010705; EP 01957921 A 20010705; ES 01957921 T 20010705; JP 2002507744 A 20010705; MX PA02012637 A 20010705; TR 200402500 T 20010705; US 31287403 A 20030102; ZA 200300987 A 20030205