

Title (en)

Process for the preparation of free-flowing aqueous dispersions of betaines.

Title (de)

Verfahren zur Herstellung fliessfähiger wässriger Dispersionen von Betainen.

Title (fr)

Procédé de préparation de dispersions aqueuses coulantes de bétaines.

Publication

EP 0492228 B1 19950405 (DE)

Application

EP 91121021 A 19911207

Priority

DE 4040887 A 19901220

Abstract (en)

[origin: EP0492228A1] Process for the preparation of free-flowing aqueous dispersions which contain 10 to 30% by weight of betaines of the general formula <IMAGE> in which R<1> is straight-chain alkyl radical with at least 16 carbon atoms or the radical R<4>CONH(CH₂)_x- where R<4>CO is an acyl radical derived from a saturated straight-chain fatty acid with at least 16 carbon atoms, and x = 2 or 3, R<2>, R<3> are identical or different and each is an alkyl radical with 1 to 4 carbon atoms, y is 1, 2 or 3, by quaternisation of a tertiary amine of the general formula R<1>-NR<2>R<3> with omega -halogenoalkylcarboxylic acids X(CH₂)_yCOOY or their salts (X = halogen radical, Y = hydrogen, alkali metal or ammonium ion) in aqueous or aqueous-alcoholic solution at elevated temperatures, wherein anionic surfactants are added to the reaction mixture before the quaternisation reaction in amounts such that the finished solution contains 1 to 10% by weight of anionic surfactants. <??>White, free-flowing dispersions which are readily handled, pumped and metered are obtained.

IPC 1-7

C11D 1/90

IPC 8 full level

C11D 1/90 (2006.01); **C11D 1/94** (2006.01)

CPC (source: EP US)

C11D 1/90 (2013.01 - EP US); **C11D 1/94** (2013.01 - EP US)

Cited by

EP0739878A1; WO9524376A1; WO9512571A1

Designated contracting state (EPC)

BE DE ES FR GB IT NL

DOCDB simple family (publication)

EP 0492228 A1 19920701; EP 0492228 B1 19950405; DE 4040887 A1 19920702; DE 4040887 C2 19940519; DE 59105110 D1 19950511; ES 2070406 T3 19950601; US 5239095 A 19930824

DOCDB simple family (application)

EP 91121021 A 19911207; DE 4040887 A 19901220; DE 59105110 T 19911207; ES 91121021 T 19911207; US 78603791 A 19911031