Title (en)

POWDERY SURFACE-ACTIVE AGENT MIXTURE

Title (de

PULVERFÖRMIGE TENSIDMISCHUNG

Title (fr)

MELANGE PULVERULENT D'AGENTS TENSIOACTIFS

Publication

EP 0614484 B1 19970409 (DE)

Application

EP 92923773 A 19921123

Priority

- DE 4139551 A 19911130
- EP 9202694 W 19921123

Abstract (en

[origin: WO9311212A1] A process for preparing powdery surface-active agent mixtures by spray drying aqueous suspensions of the ingredients should allow the normally used alkylbenzol-sulphonate to be replaced by alkylsulphate, without causing the spontaneous inflammation of the spraydried goods but allowing pourable and flowable, non-clotting powdery products to be obtained. For that purpose, an amount comprised between 2 and 15 parts by weight alkylsulphate having the formula R?1-OSO3?X, in which R?1 stands for an alkyl residue with 10 to 20 C atoms and X for an ammonium ion possibly substituted by alkali, ammonium, alkyl or hydroxyalkyl, an amount comprised between 1 and 5 parts by weight alkylglycoside having the formula R?2-O(G)n?, in which R?2 stands for an alkyl residue with 8 to 22 C atoms, G stands for a glycose unit and n is a number from 1 to 10, the weight ratio between alkylsulphate and alkylglycoside being comprised between 8:1 and 1:1, and an amount comprised between 20 and 100 parts by weight of an essentially anorganic, phosphate-free excipient containing alkali carbonate and alkali alumosilicate in a weight ratio comprised between 2:1 and 1:3, are mixed with enough water to produce a flowable and pumpable mixture, which is then spray-dried using drying gasses at temperatures below 250 C until so much water is removed that a powdery, pourable product is obtained.

IPC 1-7

C11D 1/83; C11D 11/02

IPC 8 full level

C11D 1/83 (2006.01); C11D 11/02 (2006.01); C11D 17/06 (2006.01); C11D 1/14 (2006.01); C11D 1/66 (2006.01)

CPC (source: EP)

C11D 1/83 (2013.01); C11D 11/02 (2013.01); C11D 1/146 (2013.01); C11D 1/662 (2013.01)

Designated contracting state (EPC)

AT BE DE ES FR IT

DOCDB simple family (publication)

**WO 9311212 A1 19930610**; AT E151452 T1 19970415; DE 4139551 A1 19930603; DE 59208338 D1 19970515; EP 0614484 A1 19940914; EP 0614484 B1 19970409; ES 2100367 T3 19970616; JP H07501564 A 19950216

DOCDB simple family (application)

**EP 9202694 W 19921123**; AT 92923773 T 19921123; DE 4139551 A 19911130; DE 59208338 T 19921123; EP 92923773 A 19921123; ES 92923773 T 19921123; JP 50977993 A 19921123