

Title (en)

MULTI-PHASE CLEANING AGENT POLYALKOXYLATED ALCOHOLS WITH END GROUP TERMINATIONS

Title (de)

MEHRPHASIGES REINIGUNGSMITTEL MIT ENDGRUPPENVERSCHLOSSENEM POLYALKOXYLIERTEM ALKOHOL

Title (fr)

PRODUIT DE NETTOYAGE MULTIPHASE CONTENANT UN ALCOOL POLYALCOXYLE FERMANT LE GROUPE TERMINAL

Publication

**EP 1141224 B1 20030917 (DE)**

Application

**EP 99963521 A 19991214**

Priority

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- EP 9909890 W 19991214

Abstract (en)

[origin: WO0039268A1] The invention relates to polyalkoxylated alcohols of formula (I),  $R_{<1>}O[CH_2CH(CH_3)O]_p[CH_2CH(R_{<2>})O]_qR_{<3>}$  with end group terminations, wherein  $R_{<1>}$  is a linear, aliphatic hydrocarbon with 1 to approximately 22 carbon atoms or a mixture of various such residues,  $R_{<2>}$  is a hydrogen atom or a lower alkyl residue with 1 to 6 carbon atoms,  $R_{<3>}$  is a linear or branched, saturated or unsaturated, aliphatic, optionally aryl-substituted, acyclic or cyclic, hydrocarbon residue with 1 to approximately 78 carbon atoms and optionally one or more hydroxy groups and/or ether groups -O- or a mixture of various such residues, p is a number from 0 to approximately 15 and q is a number from 0 to approximately 50 and the sum of p and q is at least 1. Said alcohols may be present (i) in a liquid multi-phase cleaning agent with at least two continuous phases which contains at least one aqueous phase I and a non-aqueous liquid phase II which is immiscible with said aqueous phase and which can be temporarily converted to an emulsion by shaking. Said alcohols may further be contained (ii) in a cleaning agent for hard surfaces for reducing the effects of rain and/or fogging. They may also be used (iii) in a method of reducing the effects of rain and/or fogging on a hard surface which has been treated with a liquid cleaning agent. To this end, the surface is treated with a liquid cleaning agent which contains at least one alkoxyated dihydroxy aromatic compound of formula (I) in a concentrated or diluted form. The alcohols according to the invention are further used in (iv) a method of cleaning hard surfaces, especially glass. According to said method, the cleaning agent according to (i) is temporarily converted to an emulsion by shaking, is applied, especially by spraying, on the surface to be cleaned in an amount of 1.5 to 10 g per m<sup>2</sup> and the surface is cleaned, if necessary, by wiping it with an absorbent soft object.

IPC 1-7

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IPC 8 full level

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