

Title (en)  
Cleaning compositions and their use

Title (de)  
Reinigungsmittel und deren Verwendung

Title (fr)  
Compositions nettoyantes et leur utilisation

Publication  
**EP 0994178 B1 20030205 (DE)**

Application  
**EP 99120336 A 19991012**

Priority  
DE 19847498 A 19981015

Abstract (en)  
[origin: EP0994178A1] Detergent comprises (a) 0.1-30 wt.% ether-carboxylate(s) (I), (b) 0.1-40 wt.% alk(en)yl- or phenyl-ethoxylate terminated with alk(en)yl or phenyl glyceryl ether (II) and (c) 0.01-20 wt.% N-alkylpyrrolidone(s) (III), with an (un)saturated, linear or branched 6-18 C alkyl group, in aqueous solution. Detergent comprises (a) 0.1-30 wt.% ether-carboxylate(s) of formula (I), (b) 0.1-40 wt.% alk(en)yl- or phenyl-ethoxylate terminated with alk(en)yl or phenyl glyceryl ether of formula (II) and (c) 0.01-20 wt.% N-alkylpyrrolidone(s) (III), with an (un)saturated, linear or branched 6-18 carbon (C) alkyl group, in aqueous solution;  $R_{<1>} < O-CH_2-CH_2- )_k -OCH_2COOM$  (I)  $R_{<2>} < O-CH_2-CH_2- )_m -CH_2-CH(OH)-CH_2-RO_{<3>}$  (II)  $k = 0-12$ ;  $m = 1-40$ ;  $R_{<1>} =$  (un)saturated, linear or branched 4-18 C alkyl or 10-18 C phenylalkyl;  $M =$  a mono-, di- or trivalent metal cation and/or a proton ( $H_{<+>}$ );  $R_{<2>}, R_{<3>} =$  (un)saturated, linear or branched 3-18 C alkyl or 10-18 C phenylalkyl. An Independent claim is also included for application solutions of the detergent in aqueous or aqueous-alcoholic solution.

IPC 1-7  
**C11D 1/86**; **C11D 1/83**; **C11D 3/386**; **C11D 3/28**

IPC 8 full level  
**C11D 1/83** (2006.01); **C11D 1/86** (2006.01); **C11D 3/28** (2006.01); **C11D 3/386** (2006.01); **C11D 1/06** (2006.01); **C11D 1/722** (2006.01); **C11D 1/75** (2006.01)

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Cited by  
WO2004018599A1; CN105154253A; CN108410594A; AU2003259326B2; EP2438904A1; US2009123449A1; WO2004074417A1; US7696143B2; US8343905B2; US9271909B2; EP1139761B1; WO2007141067A1; WO2012045768A1

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