

Title (en)  
Cleaning compositions and their use

Title (de)  
Reinigungsmittel und deren Verwendung

Title (fr)  
Compositions nettoyantes et leur utilisation

Publication  
**EP 0994178 A1 20000419 (DE)**

Application  
**EP 99120336 A 19991012**

Priority  
DE 19847498 A 19981015

Abstract (en)  
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.

Abstract (de)  
Die Erfindung betrifft Reinigungszusammensetzungen umfassend wenigstens ein Ethercarboxylat, wenigstens ein nichtionisches Tensid und wenigstens ein N-Alkylpyrrolidon. Die Erfindung betrifft ferner Anwendungslösungen umfassend diese Reinigerzusammensetzung sowie die Verwendung der Reinigerzusammensetzung und Anwendungslösung.

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)

CPC (source: EP)  
**C11D 1/83** (2013.01); **C11D 3/28** (2013.01); **C11D 1/06** (2013.01); **C11D 1/721** (2013.01); **C11D 1/722** (2013.01); **C11D 1/75** (2013.01)

Citation (search report)  
• [A] EP 0342499 A2 19891123 - HENKEL KGAA [DE]  
• [A] EP 0867115 A2 19980930 - BRAUN MEDICAL AG [CH]  
• [A] FR 2395309 A1 19790119 - CHEMISCHE INST SCHAFFER AG [CH]  
• [A] US 5814588 A 19980929 - CALA FRANCIS R [US], et al  
• [A] GB 2292562 A 19960228 - PROCTER & GAMBLE [US]  
• [A] WO 9217564 A1 19921015 - WEIGERT CHEM FAB [DE]

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

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0994178 A1 20000419**; **EP 0994178 B1 20030205**; AT E232235 T1 20030215; DE 19847498 A1 20000420; DE 19847498 C2 20020508; DE 59904212 D1 20030313; ES 2192008 T3 20030916

DOCDB simple family (application)  
**EP 99120336 A 19991012**; AT 99120336 T 19991012; DE 19847498 A 19981015; DE 59904212 T 19991012; ES 99120336 T 19991012