

Title (en)

LIQUID WASHING AND CLEANING COMPOSITION VIRTUALLY DEVOID OF INORGANIC BUILDER SALTS

Publication

EP 0104434 A3 19851121 (DE)

Application

EP 83108321 A 19830824

Priority

DE 3232616 A 19820902

Abstract (en)

[origin: US4608189A] Aqueous liquid laundering and cleaning detergent compositions, essentially free from inorganic builder salts, comprising: (a) 20-40 wt. % of a mixture of nonionic surfactants of the formula: $\text{RO}[\text{CH}_2\text{-CH}(\text{CH}_3)\text{-O}]_m\text{-(CH}_2\text{-CH}_2\text{-O)}_n\text{-H}$ (I) where R is a C10-C20 aliphatic hydrocarbon group; $m=1\text{-}5$; $n=3\text{-}20$; $n>m$; and the mixture is composed of: (i) 5-9 parts by weight of a Formula I compound where $n=3\text{-}9$, (ii) 1-5 parts by weight of a Formula I compound where $n=10\text{-}20$, and (iii) 0-6 parts by weight of a Formula I compound where $m=1\text{-}3$, and $n=9\text{-}11$; (b) 2-25 wt. % of a sodium, potassium, mono-, di- or trialkanolamine soap of a C101-C20 fatty acid; (c) 0.001-2 wt. % of a proteolytic enzyme; and (d) 5-25 wt. % C214 C4 mono- or polyhydroxy alcohol; wherein (a) and (b) together are 30-50 wt. % of the composition, and a 1% aqueous solution thereof has a pH of 6.5-9.

IPC 1-7

C11D 3/386; **C11D 1/83**; **C11D 3/43**; **C11D 17/00**

IPC 8 full level

C11D 3/386 (2006.01); **C11D 3/43** (2006.01); **C11D 10/04** (2006.01); **C11D 17/00** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP US)

C11D 3/38618 (2013.01 - EP US); **C11D 3/38663** (2013.01 - EP US); **C11D 3/43** (2013.01 - EP US); **C11D 10/04** (2013.01 - EP US); **C11D 10/045** (2013.01 - EP US); **C11D 1/72** (2013.01 - EP US)

Citation (search report)

[A] FR 2448568 A1 19800905 - UNILEVER NV [NL]

Cited by

US5929014A; EP0272574A3; EP0235774A3; EP0592947A1; EP0339994A3; AU719399B2; EP0306843A3; US4992263A; WO9509229A1; WO9606910A3; WO9705227A1; EP3510133B1; WO2018049036A1; US11021680B2; US11807835B2

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