

Title (en)

Linear viscoelastic aqueous liquid detergent composition, especially for automatic dishwashers, of improved high temperature stability.

Title (de)

Lineares viskoseelastisches wässriges Flüssigwaschmittel, insbesondere für Geschirrspülmaschinen mit verbesserter Temperaturbeständigkeit.

Title (fr)

Composition détergente aqueuse liquide visco-élastique linéaire, spécialement pour le lavage de la vaisselle en machine avec stabilité améliorée à haute température.

Publication

EP 0517313 A1 19921209 (EN)

Application

EP 92201531 A 19920527

Priority

- US 71160391 A 19910607
- US 71160591 A 19910607
- US 71160891 A 19910607
- US 71168891 A 19910607
- US 72608991 A 19910705

Abstract (en)

Automatic dishwasher detergent composition is formulated as a linear viscoelastic, pseudoplastic, gel-like aqueous product of exceptionally good physical stability, low bottle residue, low cup leakage, and improved cleaning performance. Linear viscoelasticity and pseudoplastic behavior is attributed by incorporation of cross-linked high molecular weight polyacrylic acid type thickener. Potassium to sodium weight ratios of at least 1/1 minimize amount of undissolved solid particles to further contribute to stability and pourability. Control of incorporated air bubbles functions to provide the product with a bulk density of 1.35 to 1.40 g/cc which roughly corresponds to the density of the liquid phase. Stearic acid or other fatty acid or salt further improve physical stability.

IPC 1-7

C11D 3/37; **C11D 3/395**; **C11D 17/00**

IPC 8 full level

C11D 1/04 (2006.01); **C11D 3/08** (2006.01); **C11D 3/12** (2006.01); **C11D 3/37** (2006.01); **C11D 3/395** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP)

C11D 1/04 (2013.01); **C11D 3/08** (2013.01); **C11D 3/128** (2013.01); **C11D 3/3765** (2013.01); **C11D 3/3956** (2013.01); **C11D 3/3958** (2013.01); **C11D 17/003** (2013.01)

Citation (search report)

- [XP] EP 0446761 A1 19910918 - COLGATE PALMOLIVE CO [US]
- [A] EP 0398021 A2 19901122 - COLGATE PALMOLIVE CO [US]

Cited by

EP0992574A1; EP0560615A1; WO0020547A1

Designated contracting state (EPC)

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