

Title (en)

Linear viscoelastic aqueous liquid automatic dishwasher detergent composition.

Title (de)

Lineares, viskoelastisches, wässriges flüssiges Waschmittel für Geschirrspülautomaten.

Title (fr)

Composition détergente aqueuse liquide linéaire visco-élastique pour le lavage de la vaisselle en machine.

Publication

**EP 0517314 A1 19921209 (EN)**

Application

**EP 92201532 A 19920527**

Priority

- US 71160391 A 19910607
- US 71160591 A 19910607
- US 71160891 A 19910607
- US 71168891 A 19910607
- US 72506791 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 as well as the composition not substantially adhering to or wetting the interior surface of a polyolefinic bottle. Linear viscoelasticity and pseudoplastic behavior is attributed by incorporation of at least one 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 further contribute to the stability and pourability of the composition. Control of incorporated air bubbles functions to provide the product with a bulk density of 1.32 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)

- [X] EP 0398021 A2 19901122 - COLGATE PALMOLIVE CO [US]
- [A] EP 0329419 A2 19890823 - UNILEVER PLC [GB], et al
- [XP] EP 0446761 A1 19910918 - COLGATE PALMOLIVE CO [US]

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AT BE CH DE DK ES FR GB IT LI LU NL SE

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