

Title (en)
IMPROVEMENTS RELATING TO LAUNDRY CLEANING COMPOSITIONS

Title (de)
VERBESSERUNGEN IM ZUSAMMENHANG MIT WÄSCHEREINIGUNGSZUSAMMENSETZUNGEN

Title (fr)
AMÉLIORATION DE COMPOSITIONS NETTOYANTES DE BLANCHISSERIE

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Abstract (en)
[origin: WO2008129026A1] The invention provides a laundry cleaning composition comprising: a) at least one laundry adjunct selected from: builder, enzyme, fluorescer, perfume, anti-redeposition polymer, soil release polymer, source of alkalinity, chelating agents other than for hardness ions, bleach or precursor thereof, and, b) a surfactant system comprising: i) at least 1%wt on total surfactant of one or more anionic surfactants, ii) at least 1%wt on total surfactant of one or more nonionic surfactants, and, iii) 0.5-30%wt on total surfactant of, a mixed cationic surfactant system consisting of a 9:1-1:9 weight ratio of one or more first cationic surfactant of general type (I) and one or more second cationic surfactant of general type (II), wherein: cationic surfactants of type I are quaternary ammonium compounds of the general formula: C₄₅₃₉ (C) CPL -53- [R₁ -N⁺ (R₂) 2-CH 2-R₃] Z⁻ (Type I) in which: Z⁻ is an anionic counter-ion, R₁ is a straight or branched C₆ to C₂₀ alkyl or alkenyl group, R₂ is, independently, a C₁ to C₄ alkyl group, R₃ is H, phenyl, benzyl or C₁ to C₂₀ alkyl benzyl, and, cationic surfactants of type II which are quaternary ammonium compounds of the general formula: [R₁ -(A) n-N⁺ (R₄) ((A) IR₅)-(A) mR₄] Z⁻ (Type II) in which: Z⁻, R₁ are as defined above, A is the same or a different C₁-C₄ alkoxy group and n, m and l are independently 0 to 30, R₄ is, independently, R₂ or a C₂-C₄ hydroxy-alkyl group, and, R₅ is R₂ or H with the proviso that should the structure of a type II cationic surfactant be such that it falls within the definition of type I cationic surfactants it shall be counted only as a type I cationic surfactant. Preferably the Type I surfactant is benzalkonium chloride and preferably the Type II surfactant is selected from the group comprising fatty dialkyl dimethyl hydroxy-ethyl ammonium chloride, fatty monoalkyl tri-ethoxy trimethyl ammonium chloride and mixtures thereof. Preferably the ratio of the type I to type II surfactant is in the range 1:1-5:1, more preferably 2:1-4:1.

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