

Title (en)
LOW PH LAUNDRY DETERGENT COMPOSITION

Title (de)
WASCHMITTELZUSAMMENSETZUNG MIT NIEDRIGEM PH

Title (fr)
COMPOSITION DE DÉTERGENT POUR LESSIVE À BAS PH

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Application
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Priority
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Abstract (en)

The present invention relates to a solid free flowing particulate laundry detergent composition comprising: (a) anionic deterative surfactant; (b) from 0wt% to 8wt% zeolite builder; (c) from 0wt% to 4wt% phosphate builder; (d) from 0wt% to 8wt% sodium carbonate; (e) from 0wt% to 8wt% sodium silicate; (f) from 4wt% to 20wt% organic acid; and (g) polyester soil release polymer, wherein the polyester soil release polymer has the structure: wherein n is from 1 to 10; m is from 1 to 15; X is H or SO₃ Me; wherein Me is H, Na⁺, Li⁺, K⁺, Mg²⁺, Ca²⁺, Al³⁺, ammonium, mono-, di-, tri-, or tetra-alkylammonium; wherein the alkyl groups are C₁-C₁₈ alkyl or C₂-C₁₀ hydroxyalkyl, or any mixture thereof; R₁ are independently selected from H or C₁-C₁₈ n- or iso-alkyl; and/or the polyester soil release polymer consists of structure units (1) to (3): wherein: a, b and c are from 1 to 10; x, y is from 1 to 10; z is from 0.1 to 10; Me is H, Na⁺, Li⁺, K⁺, M²⁺, Ca²⁺, Al³⁺, ammonium, mono-, di-, tri-, or tetra-alkylammonium wherein the alkyl groups are C₁-C₁₈ alkyl or C₂-C₁₀ hydroxyalkyl, or any mixture thereof; R₁ are independently selected from H or C₁-C₁₈ n- or iso-alkyl; R₂ is a linear or branched C₁-C₁₈ alkyl, or a linear or branched C₂-C₃₀ alkenyl, or a cycloalkyl group with 5 to 9 carbon atoms, or a C₆-C₃₀ aryl group, or a C₆-C₃₀ arylalkyl group, wherein the composition at 1wt% dilution in deionized water at 20°C, has an equilibrium pH in the range of from 6.5 to 9.0, wherein the composition comprises from 30wt% to 90wt% base detergent particle, wherein the base detergent particle comprising (by weight of the base detergent particle): (a) from 4wt% to 35wt% anionic deterative surfactant; (b) optionally, from 1wt% to 8wt% zeolite builder; (c) from 0wt% to 4wt% phosphate builder; (d) from 0wt% to 8wt% sodium carbonate; (e) from 0wt% to 8wt% sodium silicate; (f) from 1wt% to 10wt% organic acid; and (g) optionally, from 1wt% to 10wt% magnesium sulphate.

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Citation (search report)

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