

Title (en)
LAUNDRY DETERGENT COMPOSITION

Title (de)
WÄSCHEWASCHMITTELZUSAMMENSETZUNG

Title (fr)
COMPOSITION DE DÉTERGENT POUR LESSIVE

Publication
EP 3301159 B1 20230802 (EN)

Application
EP 17194535 A 20171003

Priority
EP 16192037 A 20161003

Abstract (en)
[origin: EP3301159A1] 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) alkoxyated polyalkyleneimine, wherein said alkoxyated polyalkyleneimine has a polyalkyleneimine core with one or more side chains bonded to at least one nitrogen atom in the polyalkyleneimine core, wherein the alkoxyated polyalkyleneimine has an empirical formula (II) of $(PEI)_o-(EO)_m(PO)_n-R_2$ or $(PEI)_o-(PO)_n(EO)_m-R_2$, wherein o is the average number-average molecular weight (MW PEI) of the polyalkyleneimine core of the alkoxyated polyalkyleneimine and is in the range of from 100 to 100,000 Daltons, wherein m is the average degree of ethoxylation in said one or more side chains of the alkoxyated polyalkyleneimine which ranges from 10 to 50, wherein n is the average degree of propoxylation in said one or more side chains of the alkoxyated polyalkyleneimine which ranges from 1 to 50, and wherein R₂ is independently selected from the group consisting of hydrogen, C₁-C₄ alkyls, and combinations thereof, 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.

IPC 8 full level
C11D 1/02 (2006.01); **C11D 3/20** (2006.01); **C11D 3/37** (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP)
C11D 1/02 (2013.01); **C11D 3/2086** (2013.01); **C11D 3/3723** (2013.01); **C11D 17/06** (2013.01)

Cited by
CN114364781A; WO2023074100A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3301159 A1 20180404; EP 3301159 B1 20230802

DOCDB simple family (application)
EP 17194535 A 20171003