

Title (en)

STABLE, AQUEOUS CONCENTRATED LIQUID DETERGENT COMPOSITIONS CONTAINING HYDROPHILIC COPOLYMERS

Title (de)

STABILE WÄSSRIGE KONZENTRIERTE FLÜSSIGWASCHMITTEL ENTHALTEND HYDROPHILE COPOLYMERE

Title (fr)

COMPOSITIONS DETERGENTES LIQUIDES CONCENTREES AQUEUSES STABLES, CONTENANT DES COPOLYMERES HYDROPHILES

Publication

EP 0770122 B1 19981209 (EN)

Application

EP 95925829 A 19950705

Priority

- EP 9502597 W 19950705
- US 27494894 A 19940714
- US 27493894 A 19940714

Abstract (en)

[origin: WO9602622A1] A liquid detergent composition containing surfactant, electrolytes and 0.01 - 5 % of at least one hydrophilic copolymer represented by formula (I) or (II), where x, y, z, a, and b are integers and N is an alkali metal, or hydrogen and the monomer units are in random order. (x + y):z is from about 5:1 to 1000:1, and y can be any value ranging from zero up to the maximum value of x, R1 = H or CH3, R2 = COOM, OCH3, SO3M, O-CO-CH3, CO-NH2, R3 = CH2-O-, CH2-N-, COO-, -O-, (i), CO-NH-, R4 = -CH2-CH2-O, R5 = alkyleneoxy group, preferably propyleneoxy or butyleneoxy groups, with the provision that, if b is different from zero, the values of a and b in the sidechain are such that the combined weights of R4 and R5 are such that the monomer has a solubility of at least about 500 grams/liter in water; formula (II), where R6 = (a) or (b) or mixtures of both; wherein in formula (II), x, y, z, a, and b are integers and M is an alkali metal such as sodium, or hydrogen, and the monomer units are in random order, (x + y):z is from about 5:1 to 1000:1, and y can be any value ranging from zero up to the maximum value of x, and b can be zero, and R1 = H or CH3, R2 = COOM, OCH3, SO3M, O-CO-CH3, CO-NH2, R4 is ethyleneoxy and R5 is alkyleneoxy, preferably propyleneoxy or butyleneoxy, with the provision that, if b is different from 0, the values of a and b in the sidechain are such that the combined weights of R4 and R5 are such that the monomer has a solubility of at least about 500 grams/liter in water. Water makes up the remainder of the laundry detergent formulation.

IPC 1-7

C11D 3/37

IPC 8 full level

C11D 3/37 (2006.01); **C11D 17/08** (2006.01)

CPC (source: EP)

C11D 3/3765 (2013.01); **C11D 3/3773** (2013.01)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 9602622 A1 19960201; AU 2981495 A 19960216; DE 69506551 D1 19990121; DE 69506551 T2 19990506; EP 0770122 A1 19970502; EP 0770122 B1 19981209; JP H10502694 A 19980310

DOCDB simple family (application)

EP 9502597 W 19950705; AU 2981495 A 19950705; DE 69506551 T 19950705; EP 95925829 A 19950705; JP 50463996 A 19950705