

Title (en)

CLEANER FORMULATIONS THAT PREVENT THE DISCOLORATION OF PLASTIC ARTICLES

Title (de)

REINIGERFORMULIERUNGEN ZUR VERHINDERUNG DER VERFÄRBUNG VON KUNSTSTOFFGEGENSTÄNDEN

Title (fr)

FORMULATIONS DE NETTOYANTS POUR EMPECHER LA DECOLORATION D'ARTICLES EN MATIERE PLASTIQUE

Publication

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Application

**EP 02716702 A 20020130**

Priority

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Abstract (en)

[origin: US2004072716A1] The invention relates to cleaning formulations and to the use of the cleaning formulations for preventing the discoloration of plastic articles during washing in machine dishwashers. The cleaning formulations comprise the following components: a) copolymers containing a1) from 10 to 60% by weight of at least one monomer unit (A) from the group of the monoethylenically unsaturated C3-C10 monocarboxylic and dicarboxylic acids or their anhydrides, a2) from 40 to 90% by weight of at least one monomer unit (B) of the formula (I) where R<1>, R<2> and R<3> independently of one another are H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>3</sub>H<sub>7</sub>, COOH or OH, Y is -C(=O)-, -C(=O)-O-, -O-, -O-C(=O)-, -O-C(=O)-O- or -C(=O)-NH-, n is 0 or 1, and R<4> is a linear or branched, cyclic or acyclic aliphatic radical having from 7 to 100 carbon atoms, and a3) from 0 to 30% by weight of at least one further monomer unit (C) copolymerizable with the monomer units (A) and (B) and from the group consisting of C1-C6 (meth)acrylic esters, C1-C6 vinyl esters, C2-C8 olefins, styrenes, acrylonitriles, acrylamides, vinylformamides, allyl alcohols, vinylphosphonates, vinyl-substituted heterocycles and unsaturated organosulfonic acids, b) a bleaching system comprising at least one component from the group consisting of bleach, bleach activator and bleaching catalyst.

IPC 8 full level

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Cited by

WO2012025486A1; DE102012200402A1; WO2013104434A1; DE102010039815A1; DE102011085998A1; WO2013068134A1

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