

Title (en)  
COPOLYMERS THAT PREVENT GLASS FROM CORRODING

Title (de)  
COPOLYMERE ZUR VERHINDERUNG VON GLASKORROSION

Title (fr)  
COPOLYMERES POUR EMPECHER LA CORROSION DU VERRE

Publication  
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Application  
**EP 02719733 A 20020125**

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Abstract (en)  
[origin: DE10104469A1] The invention relates to the use of copolymers in cleaner formulations for preventing glass from corroding when cleaned in a dishwasher. The copolymers contain: a) 20 to 70 % by weight of at least one monomer component (A) from the group of the monoethylenically unsaturated C3-C10 mono- and dicarboxylic acids or the anhydrides thereof; b) 30 to 80 % by weight of at least one monomer component (B) of the general formula (I), wherein R<1>, R<2> and R<3> independently represent H, CH3, C2H5, C3H7, COOH or OH, Y represents -C(=O)-, -C(=O)-O-, -O-, -O-C(=O)-, -O-C(=O)-O- or -C(=O)-NH-, n equals 0 or 1, R<4> is either an aromatic or a linear, branched or cyclic aliphatic group with 1 to 6 carbon atoms, and R<2> and R<4> optionally form together an alkyl moiety with 3 to 6 carbon atoms, which can be optionally substituted by C1-C3 alkyl groups, thereby forming a cycle; c) 0 to 25 % by weight of at least one further monomer component (C) that can be copolymerized with the monomer components (A) and (B) and that is selected from the group consisting of alpha olefins with 10 or more carbon atoms, polyisobutenes with an average of 12 to 100 carbon atoms, Cn-(meth)acrylates wherein n is greater than 6, hydroxy-(meth)acrylates, Cn vinylesters or Cn vinyl ethers wherein n is greater than 6, acrylnitriles, acrylamides, vinylformamides, allyl alcohols, vinylphosphonates, vinyl-substituted heterocycles and unsaturated organosulfonic acids.

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