

Title (en)
Machine dishwashing compositions and their use

Title (de)
Maschinengeschirrspülmittel und deren Verwendung

Title (fr)
Compositions pour lave-vaisselle automatique et leur utilisation

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Application
EP 06116118 A 20060627

Priority
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Abstract (en)
[origin: EP1741774A1] An automatic machine dishwashing composition comprising at least 1%, preferably at least 2% by weight of nonionic surfactant, a peroxygen bleach compound and a dinuclear manganese-complex having the general formula: wherein Mn is manganese which can individually be in the III or IV oxidation state; each x represents a coordinating or bridging species selected from the group consisting of H₂O, O²⁻, O²⁻, OH⁻, HO²⁻, SH⁻, S²⁻, >SO, Cl⁻, N³⁻, SCN⁻, RCOO⁻, NH²⁻ and NR₃, with R being H, alkyl or aryl, (optionally substituted); L is a ligand which is an organic molecule containing a number of nitrogen atoms which coordinates via all or some of its nitrogen atoms to the manganese centres; z denotes the charge of the complex and is an integer which can be positive or negative; Y is a monovalent or multivalent counter-ion, leading to charge neutrality, which is dependent upon the charge z of the complex; and q = z/ [charge Y]: wherein at least 50% by weight of the nonionic surfactant is selected from: (a) at least one nonionic surfactant having a melting point greater than 35 °C, preferably greater than 40 °C; (b) at least one nonionic surfactant in the form of a granule having pores with a number average pore size less than 5µm, the pores containing the nonionic surfactant; and mixtures thereof.

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Cited by
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