

Title (en)  
Corrosion-inhibiting cleaning composition

Title (de)  
Spülmittel mit Korrosionsschutzwirkung

Title (fr)  
Composition nettoyant inhibitant la corrosion

Publication  
**EP 0872543 A3 19990825 (DE)**

Application  
**EP 98106424 A 19980408**

Priority  
DE 19716094 A 19970417

Abstract (en)  
[origin: EP0872543A2] In a detergent containing builder, bleach, bleach activator and a corrosion inhibitor for metals, the inhibitor comprises either (A) metal triazole complex (I), obtained by reacting a triazole of formula (II) or a triazole (IIIA) or bis-triazole (IIIB) of formula (III) with (b) salt(s) of manganese (Mn), cobalt (Co), zinc (Zn), iron (Fe), molybdenum (Mo), tungsten (W) and/or copper (Cu) and/or (B) (IIB) of formula (II) or a mixture of 2 or more components (A) and/or (B); in which R<1> = 1-4 substituents selected from hydrogen (H) and linear and branched 1-10C alkyl groups; in (IIIA), R<2>, R<3> = H, 1-20C alkyl or 2-20C alkenyl; or one of R<2>, R<3> = NHR<4>; R<4> = H or 1-10C alkyl; in (IIIB), 2 R<2> and R<3> groups of 2 different molecules = 1-10C alkylene and the other R<2>, R<3> groups = as in (IIIA).

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IPC 8 full level  
**C11D 3/00** (2006.01); **C11D 3/16** (2006.01); **C11D 3/28** (2006.01); **C11D 3/39** (2006.01)

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**C11D 3/0073** (2013.01); **C11D 3/168** (2013.01); **C11D 3/28** (2013.01); **C11D 3/3917** (2013.01)

Citation (search report)  
• [A] WO 9510588 A1 19950420 - UNILEVER NV [NL], et al  
• [A] EP 0025863 A1 19810401 - HENKEL KGAA [DE]  
• [DA] WO 9426859 A1 19941124 - HENKEL KGAA [DE], et al  
• [A] EP 0682105 A2 19951115 - PROCTER & GAMBLE [US]  
• [A] EP 0634478 A1 19950118 - PROCTER & GAMBLE [US]  
• [A] WO 9705222 A1 19970213 - HENKEL CORP [US], et al  
• [A] WO 9703177 A1 19970130 - BENCKISER GMBH JOH A [DE], et al  
• [A] US 4321166 A 19820323 - MCGRADY JOSEPH  
• [A] DE 2155766 A1 19720518 - CIBA GEIGY AG  
• [A] GB 1180437 A 19700204 - GEIGY UK LTD  
• [A] DATABASE WPI Week 8525, Derwent World Patents Index; AN 85-027939, XP002107896, "Corrosion inhibitor contg. aluminium cpd."

Cited by  
EP1613569A4; US7243664B2; US9138393B2; US9144538B2; US7294211B2; EP3623456A1; WO2020053316A1

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