

Title (en)
Acidic limescale removal compositions

Title (de)
Saure Zusammensetzungen zum Entfernen von Kalkablagerungen

Title (fr)
Compositions acides pour enlèvement de tartre

Publication
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Application
EP 97870058 A 19970430

Priority
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Abstract (en)
The present invention relates to a liquid acidic composition having a pH below 5 and comprising from 0.1% to 70% by weight of the total composition of an acid, and a surfactant system comprising a zwitterionic surfactant and a second surfactant selected from the group consisting of: an amine oxide according to the formula $R_1R_2R_3NO$ wherein each of R_1 , R_2 and R_3 is independently a saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl group of from 1 to 30 carbon atoms, an amine according to the formula $RR'R''N$, wherein R is a saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl group of from 1 to 30 carbon atoms, and wherein R' and R'' are independently saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl groups of from 1 to 30 carbon atoms, or hydrogen, a quaternary ammonium surfactant according to the formula $R_1R_2R_3R_4N^{+}X^{-}$, wherein X is a counteranion, R_1 is a saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl group of from 1 to 30 carbon atoms, and R_2 , R_3 and R_4 are independently hydrogen, or saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl groups of from 1 to 4 carbon atoms, and mixture thereof, at a weight ratio of said zwitterionic surfactant to said second surfactant of at least 1:1. These compositions deliver excellent limescale removal performance as well as outstanding greasy soap scum cleaning on hard-surfaces.

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C11D 1/94

IPC 8 full level
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Citation (search report)

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- [X] DATABASE WPI Section Ch Week 9301, Derwent World Patents Index; Class D25, AN 93-004726, XP002042924
- [A] DATABASE WPI Section Ch Week 9050, Derwent World Patents Index; Class A97, AN 90-372270, XP002042925

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