

Title (en)

WATER INSOLUBLE ENCAPSULATED ENZYMES PROTECTED AGAINST DEACTIVATION BY HALOGEN BLEACHES

Publication

EP 0286773 A3 19900321 (EN)

Application

EP 88100045 A 19880105

Priority

US 4019187 A 19870417

Abstract (en)

[origin: EP0286773A2] A composition capable of releasing active enzyme into an aqueous, active chlorine containing media which in a first aspect comprises an enzyme core encapsulated with an initial coating of a time-release substance, a first coating of a bleach-neutralizing substance and a second coating of a time-release substance. In a second aspect, the composition comprises an enzyme encapsulated in a time-release substance designed to delay release of the enzyme in dissolution for a first-time delay, and a bleach-neutralizing substance, present as either a core material and/or a first coating on a diluent core, which is encapsulated in a time-release substance designed to delay release of the bleach-neutralizing substance into solution for a second-time delay; the first-time delay being longer than the second-time delay so that the bleach-neutralizing substance will be released and completely neutralize all active chlorine present in the solution before the enzyme is released. In a third aspect, the composition comprises an enzyme core encapsulated with a time-release substance, a diluent core encapsulated with a first coating of a bleach-neutralizing substance and a second coating of a time-release substance, and a bleach-neutralizing substance core encapsulated with a time-release substance. The invention further includes a cleaning composition which is particularly effective in warewashing which comprises one of the encapsulated enzyme-containing compositions described above, chlorine bleach, and at least one additional detergent component.

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Citation (search report)

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