

Title (en)

IMPROVED BIOCONTROL THROUGH THE USE OF CHLORINE-STABILIZER BLENDS

Title (de)

VERBESSERTE BIOLOGISCHE STEUERUNG DURCH VERWENDUNG VON CHLORSTABILISATORMISCHUNGEN

Title (fr)

BIORÉGULATION AMÉLIORÉE PAR L'INTERMÉDIAIRE DE L'UTILISATION DE MÉLANGES CHLORE-AGENT STABILISATEUR

Publication

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Application

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Abstract (en)

[origin: WO2013059074A1] A composition and methods of its use, the composition comprising: a halogen source, urea, and an additional halogen stabilizer excluding urea, optionally an alkali in a concentration sufficient to provide said composition with a pH of greater than 10; and optionally excluding a stabilized bromine compound from said composition is disclosed. Additionally, a method for reducing biological activity in a process stream is disclosed. The method comprises: providing a composition to a process stream, wherein said composition contains: a halogen, urea, and an additional halogen stabilizer excluding urea, optionally an alkali in a concentration sufficient to provide said composition with a pH of greater than 10; and optionally excluding a stabilized bromine compound from said composition. The invention is also directed to compositions and methods of their use as effective biocidal agents for water streams. The composition comprises a halogen source, halogen stabilizers containing a sulfur bearing species and ammonium salts/urea, and an alkali. The sulfur bearing species includes sulfamic acid or its salt equivalent. The ratio between nitrogen mixture of sulfur bearing species and ammonium salts or urea can be optimized at any rate. By having optimized mixing ratio of halogen to stabilizer and that of ammonium salts to sulfamic acid or sulfamate, a synergistic effect occurs which both increases the efficacy of the composition as a biocide and it avoids adverse impacts on other chemicals that are present in the water stream (such as paper additives in pulp and papermaking water streams). Best of all the composition is easy to form and easy to introduce into a water stream of concern. Its introduction can be as simple as mixing two containers of reagent prior to introduction to the water process stream.

IPC 8 full level

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