

ABSTRACT

A combined chlorine agent having a low concentration of free chlorine and a high concentration of combined chlorine whereby combined chlorine concentration of water can be heightened when added to water systems at a low concentration of free chlorine, methods of efficient production and chlorine treatment at low free chlorine concentration are provided. The combined chlorine agent consists of an aqueous agent which comprises alkali consisting of alkali metal hydroxide, sulfamic acid, and oxidizing agent based on chlorine, wherein the composition ratio of the oxidizing agent based on chlorine to the sulfamic acid is in the range from 0.45 to 0.6 by Cl / N (mole ratio), the composition ratio of the oxidizing agent based on chlorine to alkali is in the range from 0.3 to 0.4 by Cl / alkali metal (mole ratio), and free chlorine concentration in the aqueous agent is 2 % by weight or lower of total chlorine concentration.