

BioPlus* SAN9380

Water Technologies & Solutions fact sheet

liquid bromine microbiological control agent precursor for food processes

- Economical source of bromine
- Easy to feed liquid

description and use

BioMate* SAN9380 is a safe, easy to use source of bromine, used to control microbial population and bacteria, fungal and algal slimes in once through and recirculating cooling systems, air washers, brewery pasteurizers, pasteurizer cooling systems, sterilizers, vacuum pump seal water, chilled water systems and heat exchange water systems.

The bromine in this product is in the form of an inactive bromide anion, Br⁻. It has to be oxidized to hypobromous acid, HOBr, in order to be biocidal. This is achieved by activating the bromide with chlorine or sodium hypochlorite solution. Hypobromous acid is effective for controlling microbial populations in cooling water, particularly in waters contaminated with ammonia.

Control of microbial populations in cooling system is essential in order to prevent biofouling. Biofouling in heat exchangers and cooling tower fill reduces heat transfer efficiency leading to higher energy costs. Biofouling can also damage equipment through microbiologically induced corrosion (MIC) and can force unscheduled shutdowns, or extended turnaround, resulting in lost production.

treatment and feeding requirements

Correct treatment levels and frequency of BioMate SAN9380 addition depend on the degree of system

cleanliness, nutrient concentrations, temperature, types of microorganisms, pH, retention time and other system operating characteristics. The product should be used in accordance with control procedures that SUEZ establishes for a specific application.

BioMate SAN9380 must be fed in conjunction with, and intimately mixed with, chlorinated water or sodium hypochlorite solution. The mixing must take place before the components enter the cooling water. The mixing is normally achieved by passing the two components through an in-line mixer.

By changing the ratio of chlorine gas or sodium hypochlorite to BioMate SAN9380 in the mixture, the composition of the mixture fed to the system, with respect to mole ratio of HOCl to HOBr, can be adjusted in order to achieve the most cost effective ratio to control microbial populations.

Feed is controlled by a simple and accurate free or total halogen test, or on line free or total halogen analyzer.

Equipment recommendations are available upon request.

In all cases, this product must be applied in accordance with use instructions on the BioMate SAN9380 label.

Compatible Materials – BioMate SAN9380 is compatible with the following materials of construction: High density cross-linked polyethylene; Teflon; polyvinylchloride (PVC); PVDF (Kynar); polypropylene (PP); Litharge Viton; Ethylene

Propylene Resin; Hypalon; Neoprene; Buna N and Buna S Rubber. (Teflon is a registered trademark of DuPont, Kynar is a registered trademark of Autofina, Viton is a registered trademark of DuPont Dow Elastomers and Hypalon is a registered trademark of DuPont Performance Elastomers).

Avoid – mild steel and stainless steel.

general properties

Physical properties of BioMate SAN9380 are shown on the Material Safety Data Sheet (MSDS); a copy of which is available on request.

packaging information

BioMate SAN9380 is a liquid blend available in a variety of containers and delivery methods. Contact your SUEZ representative for details.

storage

Keep the container closed when product is not in use. Do not freeze. If frozen, thaw and mix completely prior to use.

safety precautions

A Material Safety Data Sheet containing detailed information about this product is available on request.

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