



FILMTEC Membranes

Water Chemistry and Pretreatment: Biological Fouling Prevention

Sodium Bisulfite

Sodium bisulfite can be added into the feed stream (for a limited time period) during normal plant operation. This intermittent application is often referred to as shock treatment. In a typical application, 500–1,000 mg/L NaHSO_3 is dosed for 30 minutes.

Use only sodium metabisulfite (food-grade) that is free of impurities and not cobalt-activated. The treatment can be carried out on every 24 hours or only when biogrowth is suspected. The efficiency of such treatment should be studied. The permeate produced during dosage will contain some bisulfite, depending on the feed concentration, the membrane type and the operating conditions. Depending on the permeate quality requirements, the permeate can be used or discarded during shock treatment.

Bisulfite is effective against aerobic bacteria but not against anaerobic microorganisms. Therefore, the efficiency of the shock treatment should be carefully assessed using the techniques described in [Assessment of the Biological Fouling Potential \(Section 2.6.2\)](#).

FILMTEC™ Membranes
For more information about FILMTEC
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Notice: The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

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