



Water Technologies & Solutions

fact sheet

Kleen* MCT411

membrane cleaner

- Optimum results are obtained when used in conjunction with a low pH Kleen MCT product.
- Excellent results are achieved when used to eliminate biological slime.
- Buffered to maintain a pH of 11.0 ± 0.5 over a range of dilutions.
- Enhanced performance at elevated temperatures.
- No adverse effects with repeated use
- Low foam formulation.

description and use

Kleen MCT411 is a high pH, powdered formulation designed to remove organics, silt and other particulate deposits from polysulfone, and all polyamide thin film composite and hollow fine fiber reverse osmosis (RO), nanofiltration (NF) and ultrafiltration (UF) membranes. This highly effective product provides superior cleanings resulting in longer system running time.

typical applications

DO NOT USE Kleen MCT411 on cellulose acetate membranes.

Optimum results are typically achieved when used in conjunction with a low pH Kleen MCT product. Please refer to the Cleaner Recommendation feature within Argo Analyzer to select the best combination of products for your specific combination of foulants and/or scale.

treatment and feeding requirements

Check with your local SUEZ representative to determine the specific conditions in your system in order to define the optimum dosage rate and cleaning procedure.

In some systems, modifications to the clean in place equipment may be required to ensure that optimum cleaning results are achieved.

The Argo Analyzer custom software package is available to assist in dose rate determination.

Dilution – The typical dilution ratio for the Kleen MCT411 product is in the range of 1-3% in proportion to the total volume of the cleaning system inclusive of cleaning tank, all interconnecting pipework, filtration and membrane pressure vessels and membrane elements.

general use instructions for membrane cleaning

Inspect cleaning tank, hoses, and cartridge filter. Install new filter elements in the cleaning loop.

Fill cleaning tank with RO permeate or DI water. Slowly add the calculated quantity of Kleen MCT411 to the cleaning tank. Mix solution by recirculating through the cleaning pump. Heat cleaning solution to the maximum value acceptable to the membrane manufacturer.

Circulate through the system in the feed direction for a minimum of 30 minutes. Circulate at the flow rate recommended by the membrane or system manufacture. If the manufacturer's recommendations are not available, please refer to your SUEZ representative for advice.



info@lenntech.com Tel. +31-152-610-900 www.lenntech.com Fax. +31-152-616-289

In cases of heavy fouling, the first return flow (up to 15% of the cleaning tank volume) should be diverted to drain to prevent re-deposition of removed solids.

For optimum results, each stage (bank) is cleaned separately in a multi stage system. If solution becomes turbid, discolored from removed material, or the pH level moves outside the range recommended by SUEZ, then dump the cleaning tank and prepare a fresh solution before cleaning additional membranes.

Using RO permeate (if possible), rinse before returning system to service.

Please do not hesitate to contact SUEZ with any questions regarding the use or application of this product.

packaging information

Kleen MCT411 is a powdered formulation and is available in a wide variety of customized containers and delivery methods. Contact your local SUEZ representative for details.

safety precautions

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

