



## Water Technologies & Solutions

#### fact sheet

# Kleen\* MCT403

#### Membrane cleaner

- Suitable for use with all thin film composite membranes
- Buffered to maintain a pH of  $3.0 \pm 0.5$  over a range of dilutions
- Low foam formulation
- No adverse effects with repeated use

#### description and use

Kleen MCT403 is a low pH powder formulation designed specifically to remove metal hydroxides, calcium carbonate, and other similar foulants from polyamide, polysulfone, and thin film composite reverse osmosis (RO), nanofiltration (NF) and ultrafiltration (UF) membrane surfaces. This highly effective product provides superior cleanings resulting in longer system running time.

## typical applications

For optimum results, Kleen MCT403 should be used in conjunction with Kleen MCT411 or Kleen MCT511.

#### 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 facilities may be required to ensure the 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 MCT403 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 MCT403 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 each membrane array in the feed direction for 30 minutes. Circulate at the flow rate recommended by the membrane or system manufacture. If the manufacturers recommendations are not available, please refer to your SUEZ representative for advice.

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 array must be cleaned separately in a multi array 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 fresh solution before cleaning additional passes.

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



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

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

## packaging information

Kleen MCT403 is a powder 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.

