

Instructions of use

Version 1.1, September 2018

Product name: MBR KLEAN 210

Use: MBR MEMBRANE CLEANER

Description

MBR KLEAN 210 is a moderate pH powder cleaner designed to remove fouling from membrane surfaces. MBR KLEAN 210 provides very effective cleaning resulting in improved fouling control, reduced energy consumption and longer system running time.

MBR KLEAN 210 can be used both for recovery and maintenance cleaning.

Instructions of use

The following general cleaning procedure can be followed for external type configurations.

For the optimum cleaning procedure for your system, contact your Norlex partner.

1. Inspect cleaning tank, hoses, and cartridge filters. Clean tank and flush hoses if necessary. Install new cartridge filters.
2. Fill cleaning tank with permeate or clean water. Turn on agitator or tank recirculation pump.
3. Slowly add MBR KLEAN 210 to cleaning tank (0,1-0,25 kg of product for every 50 L water) and allow to mix thoroughly.
4. Heat solution to a temperature of 50-75 °C, or the maximum allowable temperature for the membrane if this is lower than recommended interval. If membrane manufacturer's recommendation is not available, contact your Norlex partner.
5. Check solution pH. The solution pH should be 10,5 – 11,5 or as recommended by the membrane manufacturer. If pH is too low, adjust pH upward with NaOH. If pH is too high, adjust with hydrochloric acid.
6. Circulate solution through one stage at a time in the direction of feed flow for 15-60 minutes. Circulate at the flow rate recommended by the membrane or system manufacturer. If the manufacturer's recommendation is not available, contact your Norlex partner. Pressure should be low enough so that no permeate is produced during cleaning, but always less than 4 bar. In cases of heavy fouling, the first return flow (up to 20% of the cleaning tank volume) should be diverted to drain to prevent redeposition of removed solids. For optimum results, each stage must be cleaned separately in a multistage system.
7. If the first stage cleaning solution becomes turbid or discolored, dump the tank and prepare a fresh cleaning solution before proceeding. If solution pH or temperature moves out of the recommended range, a new solution should be prepared. In any event, a new cleaning solution should be prepared for each stage.

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8. Rinse with permeate before returning system to service.

9. When returning unit to service, divert product water to drain until any residual cleaning solution has been rinsed from system.

Before using the product, read the operating instructions and safety data sheet.

More information is available at www.norlexpoolspa.com