

Minnclean® AC & Minnclean TF

Reverse Osmosis Membrane Cleaners

Minnclean AC Cleaner

For use on thin film composite (polyamide) reverse osmosis membrane systems. Especially formulated to remove mineral scale (calcium carbonate) and metal hydroxides from the membrane surface. Minnclean AC is an acidic (low pH) membrane cleaner.

Minnclean TF Cleaner

For use on thin film composite (polyamide) reverse osmosis membrane systems. Especially formulated to remove organic foulants such as grease, grime and biological matter from the membrane surface. Minnclean TF is an alkaline (high pH) membrane cleaner.

Specifications

| | |
|---------------------------------|---------------------------------------------|
| Compounds | Acidic Powder (AC), Alkaline Powder (TF) |
| Normal Cleaning Mix Ratio | 1 pound cleaner per 15 gallons RO water |
| pH of Solution | 2.0 to 2.4 (AC), 11.2 to 11.4 (TF) |
| Foam Level | Moderate |
| Cloud Point | None |
| Rinsability | Good |
| Storage | Store sealed container in a cool dry place. |



Minnclean AC and Minnclean TF

| In The United States & Canada | | |
|-------------------------------|-----------------------------------------------|------------------------|
| Part Number | Description | Quantity |
| 3024996 | Minnclean AC Reverse Osmosis Membrane Cleaner | 10 pound container |
| 3024997 | Minnclean AC Reverse Osmosis Membrane Cleaner | 2 ten pound containers |
| 3024998 | Minnclean TF Reverse Osmosis Membrane Cleaner | 10 pound container |
| 3024999 | Minnclean TF Reverse Osmosis Membrane Cleaner | 2 ten pound containers |

Minnclean AC Reverse Osmosis Membrane Cleaner — Acid

For removing mineral scale in membrane applications.

Minnclean TF Reverse Osmosis Membrane Cleaner — Alkaline

For removing oil, grease, biological matter and grime on thin film composite membrane surfaces.

Directions:

1. Drain as much water from the system as possible.
2. Attach feed water, product water and waste discharge lines to a 30 gallon or larger tank and fill unit and tank with good quality water.
3. Use 1 pound of Minnclean AC or Minnclean TF for every 15 gallons of water in the system. Stir well to aid dissolution. For best results, water temperature should be 95-105°F (35-40°C).
4. Recirculate cleaning solution in forward mode at minimum possible pressure for 30 minutes.
5. Discharge cleaning solution to drain, drain system, clean tank and fill with clean water. Rinse for 15 minutes, adding water as needed.
6. After rinsing, return system to service and discard product water for at least 30 minutes after start up.
7. Repeat cleaning cycle if flux has not been returned to expected value.

NOTICE: Our only obligation shall be to replace or pay for any membrane cleaner material proven defective. It is the responsibility of the user to observe any limitations and/or parameters of chemical compatibility placed on the membranes by the manufacturer.

KEEP OUT OF REACH OF CHILDREN

WARNING

May cause burns. Harmful if swallowed.

(AC) Contains Sulfamic Acid; (TF) Contains Disodium Trioxosilicate

Prevent contact with skin, eyes and avoid contamination of clothing. Do not take internally. Prevent breathing dust. Use approved goggles and rubber gloves when handling.

Consult material safety data sheet for additional information. For industrial use only.

For chemical emergency, spill, leak, fire, exposure or accident, call CHEMTREC, day or night, 800-424-9300. In District of Columbia and outside continental U.S.A., call 202-483-7616.

In case of contact, flush eyes and skin with plenty of water for at least 15 minutes; for eyes, get medical attention. Contaminated clothing should be removed immediately and washed before reuse. If taken internally and person can swallow, give one glass of water or milk. Do not induce vomiting. Get immediate medical attention.

DO NOT MIX WITH CHLORINATED SOLUTIONS OR COMPOUNDS.

MINNCLEAN is a registered trademark of Minntech Corporation, A Cantel Medical Company.



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