REVERSE OSMOSIS CLEANERS

RoClean[™] P112

High pH Powder Cleaner

APPLICATIONS

RoClean™ P112 is a powder, high pH, buffered cleaner specifically formulated to remove silica scale more safely than hydrofluoric acid and ammonium bifluoride solutions, which are potentially hazardous. This product is also effective in removing severe aluminum silicates scales and stubborn organics. RoClean P112 is NSF certified.

CLEANING

Below is a summary of the RoClean P112 cleaning procedure.

- 1. Fill the cleaning tank to the desired volume with reverse osmosis (RO) permeate or deionized water. Heat the solution to the maximum acceptable temperature (according to the membrane manufacturer's guidelines), as this will dramatically increase cleaning efficiency. Add sufficient RoClean P112 to create a 2% wt/wt solution if the fouling is moderate to severe or a 1% wt/wt solution if the fouling is mild. Recirculate the solution through the cleaning tank to ensure adequate mixing.
- 2. Run the cleaning solution through each RO system stage, one at a time, for a minimum of 60 minutes at the flow rate recommended by the membrane manufacturer. If that rate is not known, use these guidelines:

ELEMENT DIAMETER inches	FLOW RATE PER VESSEL gpm (m³/hr)
4	10 (2.4)
8	40 (9.0)

- **3.** At the beginning of the cleaning process allow 15% of the initial cleaning solution to go to drain. If there is not enough tank volume add 15% of the 1% or 2% cleaning solution. If the membranes are heavily fouled and the cleaner has extreme high color or suspended solids, rebatch the chemical. Heavily fouled elements may also benefit from a soaking period.
- **4.** Monitor the pH of the solution during the cleaning process. If the pH remains in the desired range and the solution is not turbid, it may be used to clean subsequent stages. In the unlikely event that the pH falls, add more cleaner, or prepare a new batch and repeat steps 1–4.
- **5.** When cleaning is complete, rinse the membranes by flushing RO permeate through each pressure vessel. The system can then be returned to service.

CHEMICAL AND PHYSICAL PROPERTIES

CHARACTERISTICS	DATA
Appearance	White powder
pH (1% solution)	12.0 – 12.9

PERFORMANCE BENEFITS

- Superior results in dissolving silica scale and aluminum silicate scale from membranes.
- Safer to use than hydrofluoric acid and ammonium bifloride, commnly used to remove silica scale.
- Effective in breaking up stubborn organics.
- Highly buffered to resist pH changes during the cleaning process.
- Compatible with polyamide membranes from all membrane manufacturers.
- NSF certified for off-line use in systems producing drinking water.

PACKAGING

Standard regional pack sizes are listed below. Information on bulk delivery options is available on request.

PACKAGING FORMAT	NORTH America	SOUTH America	ASIA
Pail	45 lb	20 kg	20 kg
Carboy	100 lb	-	_
Drum	350 lb	_	_



Please consult your sales representative for further technical or logistical details, and always review the SDS before use to ensure suitable safety precautions are followed.

IMPORTANT: Dilute RoClean P112 to a concentration of 1% or less before neutralizing and disposing. Failure to do so can cause precipitation in the disposal tank. Please contact local technical support for any questions on diluting RoClean P112.



RoClean™ P112 TECHNICAL DATA SHEE

GLOBAL HEADQUARTERS

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