RoClean™ P303

Avista™ Low pH Powder Cleaner

Product Description

RoClean P303 power is a multicomponent, low pH, buffered cleaner specifically formulated to remove severe calcium carbonate scaling, moderate metal fouling, and metal-organic fouling from reverse osmosis (RO) membranes and nanofiltration (NF). Where powder is preferred, RoClean P303 is successfully applied to systems operating on fresh water, brackish water and sea water.

Typically applied for the removal of calcium carbonate scales where a powder product is preferred.

RoClean P303 is NSF certified for use as an offline cleaner in systems producing potable or drinking water.

Features & Benefits

Effective – RoClean P303 is best for preventing fouling from:

- Calcium Carbonate
- Metals
- Metal-Organics

Safe – Compatible with polyamide membranes from all membrane manufacturers. Suitable for use with other AVISTA cleaners.

NSF
Certified to NSF/ANSI/CAN 60

Physical Characteristics

Appearance:	White Powder
pH 2% (20°C):	2.4 – 3.8
Water Solubility:	Complete

Revision Date: April 1, 2025

Dosage and Control

Below is a summary of the RoClean P303 cleaning procedure.

1. Fill the cleaning tank to the desired volume with RO permeate or deionized water. Heat the solution to the maximum acceptable temperature (according to the membrane manufacturers guidelines), as this will dramatically increase the cleaning efficiency. Add sufficient RoClean P303 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 the guidelines:

ELEMENT DIAMETER inches	FLOW RATE PER VESSEL gpm (m^3/hr)
4	10 (2.4)
8	40 (9.0)

3. If the membranes are heavily fouled and the recirculated cleaning solution becomes discolored or turbid, discard as much as 15% of the solution volume. Heavily fouled elements may also benefit from a soaking period (up to 8 hours).

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 rises, 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.

Available Packaging

Net weight:

Drum:	350 pounds
Carboy:	90 pounds
Pail:	45 pounds

Material Compatibility

Good chemical resistance: Stainless Steel (304 & 316), Polypropylene, Polyethylene, ABS, PVDF, PVC, Viton, Buna N and PTFE.

Aluminum, brass, copper and mild steel are **not recommended** for use with this product.

Storage and Handling

When stored at a temperature between 45 - 100°F (7 - 35°C), unopened containers have a shelf life of 12 months from date of purchase.

Harmful if swallowed. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Read SDS prior to opening container.

Limit of Liability

Always follow the cleaning guidelines provided by the membrane manufacturer and the equipment manufacturer. Kurita America Inc will accept no responsibility for injury, or for membrane or other equipment damage that might result from the inappropriate application of this product.