Avista TECHNOLOGIES

Creative Chemistry. Smart Solutions.

RoClean P703

CLEANER | RO/NF

RoClean P703 powder is a multicomponent, low pH buffered cleaner formulated to remove metal foulants such as iron, manganese and aluminum from reverse osmosis (RO) membranes. It has also been particularly successful on metal fouled borehole water plants. This product is temperature compensated to ensure that the cleaning solution remains in the effective pH range regardless of variations in solution temperature.

RoClean P703 is certified by NSF International under NSF/ANSI Standard 60 for use as an off-line cleaner in drinking water systems.

PERFORMANCE BENEFITS:

- A specialized blend of proprietary buffers chelants and reducing agents to dissolve metal deposits.
- Superior to generic citric and hydrochloric acid solutions in the removal of metals and calcium carbonate scale.
- Highly buffered to resist pH changes during the cleaning process.
- Compatible with polyamide and cellulose acetate membranes from all major manufacturers.
- Suitable for use with other Avista cleaners.

INSTRUCTIONS FOR USE

Cleaning

Below is a summary of the RoClean P703 cleaning procedure. For more detail, please refer to our technical bulletin, "Cleaning Spiral Wound Membrane Elements."

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 manufacturer's guidelines), as this will dramatically increase cleaning efficiency. Add sufficient RoClean P703 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 (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, 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.

PRODUCT INFORMATION

Packaging and Storage

Standard regional pack sizes are listed below. Information on drumless or bulk tanker delivery is available on request.

SPECIFICATIONS

Appearance: White powder
pH (2% solution): 2.5-3.5

PACKAGING FORMAT	AMERICAS / ASIA	EMEA
Pail	45 lb	20 kg
Carboy	90 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.

CORPORATE OFFICES

Avista Technologies, Inc.
Global Headquarters
140 Bosstick Boulevard
San Marcos, California 92069
United States
Tel. | +1.760.744.0536

NSF Certified to NSF/ANSI 60

Avista Technologies (UK) Ltd
13 Nasmyth Square, Houstoun Industrial Estate
Livingston, EH54 5GG
United Kingdom
Tel. | +44 (0) 131 449 6677

www.avistatech.com