

Performance:

RoClean P507 offers an array of performance benefits:

- Compatible with the cellulose acetate (CA) membranes produced by the major membrane manufacturers.
- Superior results to generic cleaners for the removal of **organic** and **colloidal** foulants.
- A customized blend of buffers and other components to dissolve organic foulants and to disperse colloidal particles.
- Can be used in conjunction with other applicable cleaners as shown in the Avista cleaner selection guide.
- Highly buffered to resist pH changes during the cleaning process.
- Temperature compensated to maintain optimum pH over a wide temperature range.

RoClean P507 is a neutral pH powder cleaner developed to remove silt and organic foulants such as colloidal silica, clays, organic color and bacterial slime from spiral wound cellulose acetate elements.

This formulation is temperature compensated to ensure that the cleaning solution remains in the effective pH range regardless of variations in solution temperature.

Use Instructions:

Below is a summary of the RoClean P507 cleaning guidelines. For detailed procedures, please consult the Avista technical bulletin entitled "Cleaning of Spiral Wound Membrane Systems".

1. Fill the cleaning tank to the desired volume with RO permeate or DI water. Heat the solution to the maximum acceptable temperature (see membrane manufacturer guidelines, or use 50°C) as this will dramatically increase the cleaning efficiency. Add sufficient RoClean P507 to create a 2% wt/wt solution if the fouling is moderate/severe or 1% if the fouling is mild. Recycle the solution through the cleaning tank to ensure adequate mixing.

2. Recirculate 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 listed below:

Element Diameter	Flowrate per Vessel, gpm (m ³ /hr)
4"	10 (2.4)
8"	40 (9)

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 soak period (up to 8 hours).

4. Monitor the pH of the solution during the cleaning process. If the pH remains in the desired range of 7 and the solution is not turbid, it may be used to clean subsequent stages. In the unlikely event that the pH falls below 7, prepare a new batch and repeat steps 1-4.

5. When the clean is completed, rinse the membranes by recirculating RO permeate through each pressure vessel. The system can then be returned to service.

Packaging and Storage:

Standard regional pack sizes are listed below. Custom packaging can be provided worldwide to meet customer needs. Information on drumless or bulk tanker delivery is available on request.

Specifications	
Appearance:	white powder
pH (2% solution):	7 – 8
Density (kg/litre):	1.05± 0.05

Packaging Formats	Americas	EMEA
Pails	45 lbs	20 kg
Fibre Carboy	-	-
Fibre Drums	-	-

