

R.O Plant Products

23 R.O Plant Conditioner

**Cleaning Product for reverse Osmosis membrane and elements.
For the removal of biological and organic deposits.**

Description

Aquamarine R.O. Plant Conditioner is a food-safe sanitising solution, which kills biological film deposits from polyamide, cellulose acetate membranes and from the system including piping.

The product protects effectively against biological fouling during short and long-term storage.

Uses

- Effective preservative for the protection of polyamide membranes against biological fouling
- Removes organic coagulants from membrane surfaces
- Removes biological and organic deposits

Benefits

- No adverse with repeated use
- Liquid product, which means less mixing time for the user
- Buffered to maintaining a pH of 2.5 = or 0.5 over a range of dilutions
- Supplied in drums of 25 litres for easy handling

Dosing Instructions

The product should typically be used at a dilution of 10% in proportion to the total volume of the cleaning systems inclusive of cleaning tank, interconnecting pipe-work, filtration and membrane pressure vessels and elements.

Cleaning instructions of the equipment manufacturer should always be maintained.

Pack Size 25 Litres

Ref. No. J150 6840-99-498-9012

31 Aquamarine RO High pH Cleaner/Sanitiser

Membrane cleaning compound for sulphates scales and organic fouling.

Description and Use

RO High is a membrane cleaner based on the sodium salt of EDTA and has been developed to assist in the cleaning of acid insoluble sulphates of calcium, barium and strontium, as well as calcium fluoride.

RO High is also very effective when used in combination with high pH detergent cleaners such as Aquamarine RO Cleaner D to help remove organic substances and microbial slimes.

Product Benefits

- Liquid product for ease of application
- High level of active substance
- Wide range of application

General Specification*

Appearance: Colourless Liquid

pH as Supplied: 13.0

*All figures approximate

Treatment and Dosage Requirements

Cleaning solutions should be made up with free water to give 2.0 - 2.5% solution of RO High, when using RO High to remove calcium sulphate and calcium fluoride deposits the cleaning solution should be adjusted to pH 9.5 – 10.5 by the addition of Aquamarine Cleaner MDA. The duration of the cleaning cycle will depend on the severity of the scaling, although removal tends to be very slow. In severe cases it may be necessary to soak the membranes with RO High for 24 hours longer.

It is possible to monitor the progress of the cleaning by the pick up of hardness salts in the cleaning solution.

When using RO High to remove organic debris or biofilm, RO Cleaner LO should be used after flushing out the RO Cleaner High. Biocides such as Membrane Biocide LD can also be included at 0.1-0.2% where biofouling exists.

RO High should always be used as recommended by the membrane manufacture in respect to temperature and pH, as compatibility with all membrane types should not be assumed.

25 LITRES

Ref. No. J150-6810-99-133-5949

32 Aquamarine RO Low pH Cleaner/Sanitiser

Membrane cleaning compound for inorganic salts.

Description & Use

RO Cleaner Low is a membrane cleaner based on a food grade hydrochloric acid and other additives and is specifically designed to remove calcium carbonate scaling. Ro Cleaner Low should always be used as recommended by the membrane manufacturer or equipment supplier, in respect to cleaning, pH and temperature.

Product Benefits

Liquid product for ease of use
High level of active substance

General Specification*

Appearance: straw coloured liquid

Non Flammable

Treatment and Dosage Requirements

Cleaning solutions should be prepared with chlorine free product water to give a 4% w/w solution, the cleaning solution must be stabilised at pH 2.0 or higher.

The cleaning time depends on the amount of fouling present but is usually completed within three hours. If the cleaning solution becomes red/brown in colour it must be changed as it has become exhausted. The RO Cleaner Low solution should always be discarded after use.

25 Ltr Drum - Ref. No. J150-6550-99-975-0553

The Ro Low pH cleaner citric version may be ordered under the same reference. Please state CITRIC on the order. (this is required for all PALL Systems).

33 Aqua Membrane Biocide

Membrane cleaning compound and sanitizer.

Description and Use

Aqua Membrane Biocide is a liquid blend of sodium bisulphite specifically designed to clean metal oxides from RO membranes in particular iron oxides. The product also sanitizes the membranes.

Aqua Membrane Biocide must always be used as recommended by the membrane manufacture in respect of temperature and pH. Compatibility with all membrane types must not be assumed.

Product Benefits

Concentrated liquid product for ease of use

Effective cleaner, at low concentrations, for removing iron fouling from membranes.

Has a wide range of applications and compatibility with many other cleaners

General Specifications *

Appearance: Clear liquid

pH of 1.0% solution : 1.0

* All figures approximate

Treatment and Dosing Requirements

Chlorine free product water should be used to make up a 1.0- 2.0% solution of Membrane Biocide. The cleaning solution should be circulated through the elements for one hour at temperature of 30°C and the pH adjusted to 3.5. The flow rate should be as designated by the membrane manufacturer or equipment manufacturer. Soaking the membrane for 1-15 hours to remove iron from the membrane is recommended for severe fouling.

This sequence may have to be repeated in the case of heavily fouled membranes.

After the cleaning process the membranes should be rinsed with clean water to remove any residual Membrane Biocide.

25 Ltr - Ref. No. J150 6840-99-359-6037

34 Aqua Polysperse 676

Membrane scale controller.

Description and Use

POLYSPERSE 676 is a highly concentrated food grade scale inhibitor. The product works by a threshold effect, which means that minute amounts adsorb specifically to the surface of microcrystals thereby preventing further growth and precipitation of the crystals. The product is a polymeric organic scale inhibitor and is effective in controlling carbonate scaling, sulphate scaling and calcium fluoride scaling.

Product Benefits

- Liquid product for ease of application
- High level of active substance
- Wide range of application

General Specification*

Appearance: Colourless Liquid

Treatment and Dosage Requirements

POLYSPERSE 676 should be dosed to give a concentration of 100ppm in the concentrate stream. The level of dosage into the feed stream will depend upon the recovery of the unit. However if the recovery rate is 75% the dosage into the feed stream would be 25 ppm of POLYSPERSE 676.

The product is normally used by prediluting with water to a level that gives easy addition to the equipment being used and also allows a reasonable period between top up for the intermediate storage vessel.

Typically the product would be diluted to between 5-10% and would run without top up for approximately 1 week in the intermediate dosing tank.

25 LITRE DRUMS

Ref. No. J150 6850-99-958-0904