

DESCRIPTION

DREWCLEAN® RO is an offline alkaline cleaner used to remove a broad range of foulants that accumulate on the surfaces of reverse osmosis (RO) membranes. DREWCLEAN RO contains a proprietary blend of chelants and surfactants formulated in accordance with the specifications for cleaning solutions required by membrane manufacturers; it is supplied as a granulated solid.

DREWCLEAN RO safely and effectively removes a variety of foulants including:

- mineral scales of calcium and magnesium (carbonates, phosphates and sulfates)
- hydrated metal oxides (iron, copper and nickel)
- mixed colloids of iron and silica
- organic and microbiological deposits

During normal operation, reverse osmosis membranes become fouled by the contaminants they are designed to remove.

Eventually the accumulation of foulants results in a substantial loss of performance and potentially irreversible damage to membranes. A routine cleaning program - that is designed to restore and maintain membrane performance – will significantly improve the effectiveness, efficiency and life expectancy of RO membranes.

Drew Marine recommends offline cleaning of RO membranes when there is a:

- 10-15% drop in permeate production
- 10-15% increase in transmembrane pressure
- 10-15% increase in permeate salinity

APPLICATION & USE

DREWCLEAN RO should be used as the first step in a cleaning program and followed by DREWCLEAN® 2010 for removal of moderate to heavy residuals of calcium and magnesium carbonate scales.

It is important to perform the cleaning in this order because cleaning membranes with an acidic cleaner, without prior alkaline foulant removal, can irreversibly bind contaminants to the membrane.

The dosage of DREWCLEAN RO is 3 liters (3kg) of granules per 100 liters of cleaning solution.

Additional recommendations are available in the General Cleaning Tips section of the DREW RO Membrane Cleaning and Maintenance Guide.

Contact your Drew Marine representative for detailed instructions for the use of DREWCLEAN RO to meet the specific needs of your system.

Drew recommends the use of an online antiscalant such as AMEROYAL RO (PCN 0025628) to sustain membrane performance and reduce the frequency of offline cleanings. Always refer to the membrane manufacturer recommendations prior to implementing a cleaning program.

TYPICAL PROPERTIES

Appearance:	White, free flowing powder
pH (1% solution):	9.5

NOTE: Always wear the appropriate personal protective equipment when using this product.



Contact your Drew Marine representative for more information

PACKAGING

DREWCLEAN RO is available in 23-kg containers (PCN 7332331).

IMPORTANT INFORMATION

Drew Marine maintains Safety Data Sheets on all of its products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees.

Our Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Drew Marine products.

FEATURES

- Multicomponent, multipurpose formulation
- Granulated solid
- Convenient dosage
- Complies with membrane manufacturer guidelines for cleaning solutions

BENEFITS

- Restores membrane performance
- One-step removal of multiple foulants
- Easy to use
- Accurate & economic dosing
- Maximizes membrane service life



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