



M-411 ANTISCALANT

FOR
REVERSE OSMOSIS
DESALINATION PLANTS

Application:

- Brackish water
- High salinity, Seawater,
- Process and effluent feed-waters

Highlights:

- All water types
- Optimized for small RO units



M-411 ANTISCALANT

GENERAL DESCRIPTION

M-411 has been developed as part of OSMOTEC range of products and services dedicated to the protection of reverse osmosis membranes and equipment. It is a liquid product based on polymers and scale stabilizers.

PRINCIPLE USES

M-411 is a highly effective threshold agent, which prevents the precipitation of calcium carbonate, calcium sulfate and barium sulfate by increasing their relative solubilities. This product is often used in systems, which utilize concentrate recycle. Has been effectively applied to plants providing water for a wide range of applications:

- ✓ Boiler and Cooling System feed water
- ✓ Electronics Industry (feed stock for ion exchange)
- ✓ Potable Water
- ✓ Food Processing
- ✓ Offshore (General Purpose)

PRODUCT BENEFITS

- ✓ Highly effective antiscalant across all water types
- ✓ Specifically formulated for reverse osmosis plants with a feed water flow of less than 120 m³/day (22 GPM) operating with minimal supervision
- ✓ Low toxicity product - simple to handle
- ✓ Cost effective relative to traditional treatments such as acid and sodium hexametaphosphate
- ✓ Can replace acid programs under most conditions of use
- ✓ Compatible with all membrane types
- ✓ Exhibits good iron sequestration properties
- ✓ Enables higher recovery plant design than sodium hexametaphosphate.

DOSAGE & FEEDING

The OSMOTEC computer package will define the optimum chemical requirement for any given water quality. In calculating dosage rates, membrane manufacturer's limits, product capability, operating parameters and feed water quality are all considered.

All calculations are made on the concentrated reject brine and utilize the predicted Langelier Saturation Index, or the Stiff and Davis Index where seawater and high salinity water is in use. Calcium, barium and strontium sulfate solubility's are also calculated as is the dose of M-411.

Your OSMOTEC representative will recommend the optimum dosage necessary to ensure maximum program performance according to your specific system parameters.

M-411 may be dosed in the neat form or diluted with good quality water. The point of application should be as near to the membrane as practical, ensuring good mixing with the feed water.

MATERIALS: Storage tanks, piping and feeding equipment for M-411 should be constructed of PE, PVC, PTFE or stainless steel. Direct contact of the neat product should be avoided with aluminum, brass, carbon steel and nickel.

HANDLING-STORAGE-SHIPPING

As a standard precaution with all chemicals we recommend the use of personal protective equipments such as goggles and rubber gloves when handling. Consult the Material Safety Data Sheet as the only official source of Environmental and Safety information.

M-411 can be stored for at least 24 months from date of shipping if kept in its original, unopened container and under normal warehouse conditions. Protect from freezing and from exposure to high temperature.

M-411 is available in non-returnable containers of different sizes.

REMARKS

If you need assistance or more information on this product, please call 1300 43 34 43. For more news about OSMOTEC Company, visit our website at www.osmotec.com.au.