

CARETREAT 1 EVAPORATOR

Neutral, liquid product for the prevention of scaling in sea water evaporators

- * Product developed as part of the Marine Care Water Treatment Program.
- * Prevents scale formation at temperatures up to 160° C.
- * Reduces foaming and maintains optimum plant performance.
- * Environmentally safe product with approval for use when distilling to potable water tanks.

Introduction

In the production of distilled water in seawater evaporators, there are many conditions which can cause scaling. In the evaporator, the seawater is heated to the required temperature and is then partially evaporated at atmospheric or low pressure; it then condenses and is collected as distillate. Since, however, the seawater contains large quantities of salt in solution it is understandable that the heating and evaporation will very rapidly lead to scaling of the heat transfer surfaces. The scale deposits build up and lower plant efficiency by severely impairing the transfer of heat. This in turn considerably reduces the output. Scaling is prevented by the use of Caretreat 1 Evaporator.

If the product is used as part of the Marine Care Water Treatment program, production is monitored as part of a "Water Management" system which includes useful information on maximizing plant efficiency.

Directions for use

Caretreat 1 Evaporator is diluted with seawater and fresh water and is continuously injected into the evaporator. A dosage of 30 ml per ton of distillate is recommended for the prevention of scaling in seawater evaporators. The total dosage of Caretreat 1 Evaporator to be used depends on the capacity and the operating conditions of the evaporator. The product should be injected via the evaporator inlet or the salt water supply line. The normal procedure is to use a dosing tank containing sufficient ready diluted Caretreat 1 Evaporator for 24 hours continuous operation.

Note: For the gradual removal of existing scale deposits, at least twice the normal dose must be used. Remove deposits of more than 2mm, with Careclean HD Descalex L.

Dosing systems

Marine Care can supply a gravity dosing system kit which includes a dosing tank, flow meter, pipes, valves and all fittings.

Properties

Light brown colored, neutral liquids. Miscible with salt and fresh water in any proportion.

Odorless, non-flammable.

Contains no volatile components; in practical terms, non-toxic when ingested in a single dose.

Remains fully effective up to 160° C.

Does not corrode stainless steel, carbon steel, copper alloys, glass rubber, plastics, painted surfaces, aluminium and aluminium alloys.

Specific gravity (20°C)	: 1.10
Flash point	: None
pH (1% solution)	: 7

For detailed information on safety and health, please refer to Material Safety Data Sheet and / or Product label.

The details of our products are given completely free of undertaking. Since their application lies outside our control we cannot accept any liability for the results.