YOUR CHEMICAL SOLUTION PROVIDER



## StarMarine

# **EVAPORATOR WT**

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

- \* Product developed as part of the StarMarine Water Treatment Program.
- \* Prevents scale formation at temperatures up to  $160^{\circ}$  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 Evaporator WT.

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



#### **Directions for use**

Evaporator WT 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 Evaporator WT 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 Evaporator WT 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 Descalex Liquid.

#### **Dosing systems**

StarMarine 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 effectively up to  $160^{\circ}$  C.

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

Specific gravity (20°C)	: 1.06
Flash point	: None
pH (1% solution)	: 7-9

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

Star Marine is a specialist chemical manufacturer and any directions for the use and application of its chemicals are provided in good faith. This information is based on experience and research but is not intended to be a definitive statement for the use of the chemical or to be taken as complete process advice. While the company, its management and employees will share what knowledge they have and make recommendations, this information can never give rise to liability or consequential damage from third parties. Any information provided regarding the chemical does not exempt the customer from examining the product and its directions for use to determine the suitability themselves for its intended purpose.

