

YOUR CHEMICAL  
SOLUTION  
PROVIDER



StarMarine

C H E M I C A L S

# BOILER WT

**Advanced organic boiler water treatment to control ph, corrosion, scale and sludge.**

- \* One of the five StarMarine Water Treatment Program Products.
- \* Advanced polymer technology.
- \* Organic corrosion control.
- \* Simple accurate testing.
- \* Prevents caustic corrosion.
- \* Low "Totally Dissolved Solids".
- \* Effective scavenging of nominal oxygen presence.

## **Introduction**

Boiler WT has been developed to meet the demands for a modern, practical boiler water treatment. Boiler WT is a dark brown liquid based on neutralized organic acids, pH, corrosion, scale and sludge conditioners. The neutralized organic acids remove nominal oxygen presence and inhibit the boiler corrosion forming an organic iron compound. The correct pH is maintained by a unique blend of low molecular weight compounds which avoid pitting corrosion caused by chlorides. Use of these compounds also avoids "under deposit" corrosion which is caused by excess alkalinity in conventional treatment. A blend of advanced polymers stops the formation of scale and maintains clean surfaces in the boiler. These conditions are maintained with a low total solids level, avoiding heavy sludge, making blow down of the boiler more efficient.

## **Application**

### **StarMarine Water Treatment Program**

Suitable for all auxiliary boiler plants on motor ships including dual pressure boiler primary systems of up to 50 Bar.

### **Standard Water Treatment**

This program is suitable for boilers up to 20 bar, results we strongly recommend continuous dosage into the feed system, via a dosing pump and tank unit.



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Bunschotenweg 134 - 3089KC Rotterdam - Harbournumber 2696 - The Netherlands  
Tel: +31(0)105925831 Mob: +31(0)643065133 e-mail: [info@starmarine.nl](mailto:info@starmarine.nl)  
VATnr. NL859322968B01 Chamber of Commerce: 73019704

## Directions for use

### StarMarine Water Treatment Program

If the product is used as part of the StarMarine Water Treatment Program, it must be continuously dosed in conjunction with Condensate WT using the StarMarine dosing pump / tank unit.

For further details on dosing equipment refer to equipment information sheet.

### Standard Water Treatment

Boiler WT can be added directly to the feed water. We strongly recommend this and this is achieved by using a dosing pump.

### Control limits

#### Standard Water Treatment

The boiler water must meet the following conditions:

p-Alkalinity	: 100-200 PPM CaCO <sub>3</sub>
Chloride content	: max. 200 PPM Cl
pH	: 10.5 to 11.0
Conductivity	: 400 to 2000 uMho

### Initial dosage

Boiler WT is dosed at 0,4 litres per metric ton boiler water. Allow the boiler water to be conditioned for 24 hours and then carry out a p-alkalinity test. Adjust product dosage as necessary to obtain a p-alkalinity of 100 - 200 PPM.

At the same time determine the chloride content. If the chlorides are too high, give the boiler a top and bottom blow down in a ratio in time 2 to 1.

### Daily dosage

Recheck p-alkalinity and increase dosage of Boiler WT if necessary to maintain pH or p-alkalinity level. A minimum of 0,2 ltr/day should be dosed to maintain correct treatment levels in conjunction with regular top and bottom blown down. This dosage can vary according eg. size of the boiler system, make up water quality etc.

### Properties

Boiler WT is a dark brown liquid containing neutralized organic acids, pH, corrosion, scale and sludge conditioners. After using the treatment the boiler water will be clear and straw coloured.

Specific gravity	: 1.13 (20° C)
Flash point PM CC	: None
pH (1 % solution)	: >11

*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.

