



**MARINE
CARE**

CARETREAT 3 BOILER

Advanced organic boiler water treatment to control pH, corrosion, scale and sludge formation

- Environmentally friendly
- Excellent corrosion protection
- Low product consumption
- Simple testing
- Marinfloc approved

DESCRIPTION

Caretreat 3 Boiler has been developed to meet the demands for modern, practical boiler water treatment. Caretreat 3 Boiler is a liquid blend of neutralized organic acids, corrosion, scale and sludge conditioners.

Caretreat 3 Boiler is normally used only in conjunction with Caretreat 4 Condensate as part of the total treatment of the steam system on board.

ADVANTAGE

- removes oxygen and elevates the pH to protect the feedwater system and boiler from pitting and general corrosion
- creates an iron tannate film to protect against general corrosion even during cold lay-up
- the advanced polymers take care of dispersing sludge and protection against scale
- environmentally safe, non-toxic product
- low conductivity contribution, saves water and energy
- simple and accurate testing
- effective under all operating conditions
- protects boiler surfaces by forming an iron tannate film

APPLICATIONS

Caretreat 3 Boiler can be used in any type low and medium pressure boiler system.

Caretreat 3 Boiler can be used in the following Make-up water:

- evaporated water
- reversed osmosis water
- demineralized water



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DIRECTIONS FOR USE

Standard water treatment:

Caretreat 3 Boiler can be added directly to the feed water. We strongly recommend this is done by using a dosing pump. It is also recommended to continually dose Caretreat 3 Boiler in conjunction with Caretreat 4 Condensate. Caretreat 3 Boiler and Caretreat 4 Condensate cannot be mixed, so there is a need for two separate dosing systems.

Control limits

The boiler water must meet the following conditions:

p-Alkalinity	: 100-280 ppm CaCO ₃	
Chlorides	: max. 300 ppm Cl ⁻	(Low pressure boilers)
	: max. 100 ppm Cl ⁻	(Medium pressure boilers)
pH	: 9.5 to 10.8	
Conductivity	: 400 to 2000 μS/cm	(Low pressure boilers)
	: 400 to 1000 μS/cm	(Medium pressure boilers)

Initial dosage

Caretreat 3 Boiler is dosed at 0,75 liters 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 if necessary to obtain a p-Alkalinity of 100 - 280 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 Caretreat 3 Boiler if necessary to maintain pH or p-Alkalinity level. This dosage depends on the steam production. A minimum of 25 ml/ton steam produced should be dosed daily to maintain correct treatment levels in conjunction with regular top and bottom blown down.

DOSING SYSTEMS

Marine Care supplies a complete range of dosing systems, from manual operated systems, to custom built computer operated high tech systems, for every application.

TEST KIT

Marine Care supplies a boiler water test kit for the daily analysis of Chlorides, alkalinity and pH.

PROPERTIES

Article number	14403
pH	12,5
Density	1,16 g/cm ³
Flashpoint	Not applicable
Physical state	Liquid

APPROVALS

Marinfloc Approved OWS Compatible

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

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