

OBWT 4

Organic Boiler Water Treatment

Technical Information

Physical Data

Appearance:	Brown liquid
Specific gravity (20°C):	1.05
Flashpoint (PMCC):	None
pH (1% solution):	10.8

Description

Uniservice Unisafe OBWT 4 is a brown aqueous solution of neutralized organic acids and amines. This product is an environmentally superior oxygen scavenger based on neutralized organic acids and a blend of volatile/neutralizing amines. The function of the neutralized organic acids is to remove oxygen from the feed water and form an organic iron compound on the steel surfaces of the boiler. OBWT 4 also provides excellent protection on copper-based metals. The specialized blend of amines has little or no effect on the boiler itself but carries over with the steam in a gaseous form, condensing wherever steam has done work and reverts to water (condensate). This, in turn, elevates the condensate pH (9.0–10.5), neutralizing the carbonic acid and filming the system, protecting it from corrosion. OBWT 4 filming properties also reduce corrosion on shut-down lines when moisture and oxygen are present.

Application

OBWT 4 is suitable for all auxiliary boiler plants on motorships, including dual-pressure boiler primary systems. OBWT 4 is suitable for boilers up to 20 bars. For the best results, we strongly recommend continuous dosage into the feed system, via a Uniservice Unisafe dosing pump and tank unit.

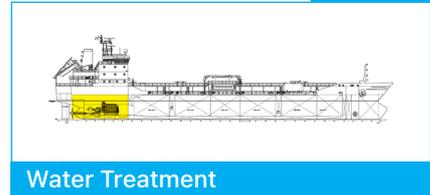
Advantages

- ▶ Environmentally safe, non-toxic product.
- ▶ Effective oxygen scavenger.
- ▶ Highly specialized single product for control of corrosion throughout the condensate system.
- ▶ Quick, simple, and accurate testing.
- ▶ An effective iron tannate film assures excellent boiler surface protection.

Direction For Use

OBWT 4 is dosed at a rate that maintains a pH of 9.0–10.0 in the condensate returns. Oxygen entrainment largely depends on hot well temperatures, and if these are maintained above 80°C, the condensate pH range of 9.0–9.5 is adequate. If hot well temperature control is erratic and averages less than 80°C, tighter control is necessary, and condensate returns should be kept in the range of pH 9.5–10.0. It is not necessary to carry out oxygen or product residual tests.

USAGE AREAS



PACKAGING



APPROVALS



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Initial Dosage

OBWT 4 is initially dosed at 0.2 l/m³ of boiler water. Systems showing signs of corrosion should be dosed at up to 0.7 l/m³ of boiler water for the first few days to passivate all metal surfaces.

Daily Dosage

After the initial dose, start metering at a minimum of 0.4 l/24 hours continuously and adjust to obtain the correct condensate pH.

Dosing System

It is recommended that OBWT 4 be dosed continuously in conjunction with OBWT 3 via a metering pump/tank unit, discharging directly into the feed system and/or the exhaust gas economizer circulating pump discharge. It must never be slug dosed to a running system via a hot well or bypass feeder.

Safety and Environment (HSE)

Uniservice Unisafe Srl have carefully developed their products to minimize the safety risks and environmental impact of using their products. However, Uniservice advises that, prior to using its products, users should read in detail the accompanying Safety Data Sheet and ensure that its products are applied within the required HSE regulations of the country in which the user operates. Best practice and safety requirements should be followed which will likely include method statements and risk assessments, together with any specific requirements of the user's own company HSE requirements.

Important Notice

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, this information is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you do a test to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth, or that the products, designs, data or information may be used without infringing the intellectual property rights of others. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by Uniservice Unisafe Srl hereunder are given gratis, and Uniservice Unisafe Srl assumes no obligation or liability for the description, designs, data and information given or results obtained, all such being given and accepted at your risk. Product images are for reference purposes only.

Contact

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