

# **BWT ONE SHOT**

**Complete Boiler Water Conditioner** 

# **Technical Information**

### **Physical Data**

Appearance: Colourless liquid

pH in 1% Solution in Water: 11.7 Flash Point: None

## **Description**

BWT ONE SHOT is a liquid compound formulated with a combination of alkaline mineral salts, sequestering agents, scale and corrosion inhibitors, and sludge conditioners. As a one-shot treatment product, it offers an all-in-one solution for boiler maintenance. BWT ONE SHOT excels at maintaining heating surfaces at their optimal thermal condition, facilitating the formation of protective iron oxides to prevent boiler steel corrosion. Additionally, its dispersant action effectively suspends sludge and sediment particles, ensuring overall boiler efficiency remains consistently at peak levels. This comprehensive treatment is a valuable asset for enhancing boiler performance and longevity.

#### **Application**

BWT ONE SHOT finds wide-ranging applicability, making it suitable for use with various auxiliary boilers, including waste heat units, economisers, package boilers, low-pressure water tube boilers, smoke tube boilers, and steam generators. Its multifaceted capabilities are instrumental in controlling scale formation, inhibiting corrosion, and conditioning sludge and sediment particles. By rendering these particles non-adhering, BWT ONE SHOT facilitates their effective removal through routine blowdown procedures. This versatility in application makes it an essential choice for the efficient maintenance of diverse boiler systems.

#### **Advantages**

- Versatile single product treatment applied as a complete boiler conditioning system.
- Dissolved hardness salts of calcium and magnesium contained in feed water tend to precipitate due to the effects of heat, forming scale compounds that impair heat transfer. BWT ONE SHOT converts potential hard scaleforming salt to inert, non-adhering soft sludge particles, which are kept in suspension.
- The formation of scale is finally eliminated when the sludge particles are removed by blowdown/scumming. BWT ONE SHOT provides a phosphate reserve to effectively neutralize hardness salts that may be introduced with the feed water.
- ▶ The balanced alkalinity supplied by BWT ONE SHOT assures:

The correct environment for the precipitation of hardness salts.

The proper conditions to maintain silica in solution.

The suitable level of alkalinity to prevent corrosion.

A protective iron oxide layer is formed under the correct alkaline conditions









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to protect boiler steel surfaces contacting the boiler water and prevent corrosion.

BWT ONE SHOT further inhibits corrosion due to traces of free oxygen in feed water.

#### **Direction For Use**

To determine the appropriate quantity of BWT ONE SHOT for treating the boiler, obtain a representative sample of the boiler water and conduct the necessary analysis. The product should be added to the feed water either through a dosage line or directly into a feed tank. Regular blowdown and scumming operations are essential to remove sludge/sediment particles effectively.

#### **Product Dose and Control**

For an untreated system, the initial dose of BWT ONE SHOT is 1 liter per 1000 liters of untreated water. Subsequent dosage rates of BWT ONE SHOT are determined by the system's alkalinity, and you can refer to the chart provided for guidance. This chart help bring the boiler water back to the mid-point values within the specified control limits, which are highlighted for easy reference.

P Alcalinity ppm CaCO <sub>3</sub>	0	50	100	150	200	225	250	300	350	400
BWT l/1000l	1	0.8	0	0	0	Blowdown				

Please note that the phosphate and alkalinity values may not always align. In cases where the feed water quality is poor, increased dosages may be necessary. Additionally, if the P alkalinity values persistently remain low, it is recommended to use ALKALINITY CONTROL to boost alkalinity levels. To maintain optimal conditions, ensure that the pH values of the boiler water are maintained within the range of 10–12.

# 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**

For further information, please contact your local Uniservice Unisafe sales representative or get in touch with us:

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