

ALKALINITY COMPOUND

APPLICATION

AWT-11 is an inorganic and non-volatile alkali for use in both high and low-pressure boilers. It inhibits corrosion and assists in the conversion of hardened precipitates into soft and non-adherent sludge. Alkaline pH-Controller can also be used as a neutralizing agent after descaling with acidic chemicals.

Dosage is according to P-alkalinity of pH. As a rule of thumb, addition of 100 ml of **AWT-11** per tonne of boiler water normally raises the P-alkalinity by 50 - 60 ppm of CaCO_3 . Due to the presence of other chemicals, large deviations from these values must be taken into consideration. Recommended practice is, therefore to base dosage on the daily logs.

The appropriate amount of **AWT-11** is dissolved in approximately 5 litres of feed water, and fed into the return pipe or feed-water pipe. For high pressure boilers, the solution is fed into the steam drum, water drum or economizer inlet by means of a chemical pump. For low pressure boilers, it may be dosed into the hotwell or condensate return tank.

After 3 - 6 hours, control analysis is carried out.

ANALYSIS

Carried out either by means of a pH-meter or titration with acid using phenolphthalein as indicator. The alkalinity is expressed as ppm of CaCO_3 . General recommendations are 100 - 200 ppm of CaCO_3 for boilers operating up to 28 bars and 100 - 150 ppm CaCO_3 for boilers in the range of 28 - 60 bars.

CHEMICAL PROPERTIES

Alkaline pH-Controller is an aqueous solution of sodium hydroxide NaOH, and is strongly alkaline. It may be corrosive to aluminium, zinc and tin. Miscible with water in all proportions but may evolve considerable heat when diluted with water. The product has a detrimental effect on natural oils and fats with pH of 14 in 4% solution.

PHYSICAL PROPERTIES

Appearance : Viscous liquid
Boiling Point : 140°C (284°F)
Specific Gravity : 1.3 gm/cm
Freezing Point : 12°C (54°F)



SAFETY AND HANDLING INFORMATION

Protective Measures	Wear chemical resistant gloves, safety goggles and footwear. Use in adequately ventilated areas. Wash hands with water after use. Avoid breathing in vapour.
Spillage & Disposal	Spillage is slippery. Wear gloves, confine spill and stop leak at source if possible. Pump liquid back into original container. Absorb remaining liquid with inert material such as dry sand or sawdust. Neutralize if necessary with vinegar or other diluted acid solution.
<u>FIRST AID</u> Eyes	Rinse eyes with copious amount of water for at least 15 minutes. If irritation persists, seek medical advice.
Skin	Flush with large amount of water, use soap if available. Remove grossly contaminated clothing, including shoes and launder before reuse. Seek medical attention if necessary.
If Inhaled	If overcome or affected, immediately evacuate victim from exposure area, using proper respiratory protection. Administer artificial respiration if breathing has stopped. Keep at rest. Seek prompt medical attention.
If swallowed	Rinse mouth; then drink 1 or 2 large glasses of water. Do not induce vomiting. Seek prompt medical attention. Never give anything via mouth to an unconscious person.
<u>HANDLING</u> Storage & Transportation	Product should be stored and transported in original containers. Do not store near heat, sparks, flame or strong oxidizers. Store away from strong acids and foodstuff. Keep container lid tightly closed. Store in a cool and dry area, away from direct sunlight. Open container slowly to control possible pressure release.
Packaging	Supplied in 25 and 200 litres non-returnable containers.

To the best of our knowledge, the information contained herein is believed to be accurate and reliable. It is the user's obligation to evaluate and use this product safely and comply with all applicable laws and regulations. The above-named supplier and its vendor makes no other warranty or representations of any kind or implied, concerning the product including no implied warranty of merchantability. The product is offered solely for your consideration, investigation and verification. No license or immunity under any patents is granted or implied.



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