

Power-Chemicals



WSB DEA



**Water Services LTD**

[www.arvanitakis.com](http://www.arvanitakis.com) [www.power-chemicals.com](http://www.power-chemicals.com) [www.refinery-chemicals.com](http://www.refinery-chemicals.com) [www.paper-specialities.com](http://www.paper-specialities.com)

**tel +30 6948 518699**

e mails

[dennis@arvanitakis.com](mailto:dennis@arvanitakis.com)

[export@power-chemicals.com](mailto:export@power-chemicals.com)



# WSB DEA

## Corrosion inhibitor for steam circuits

### Use

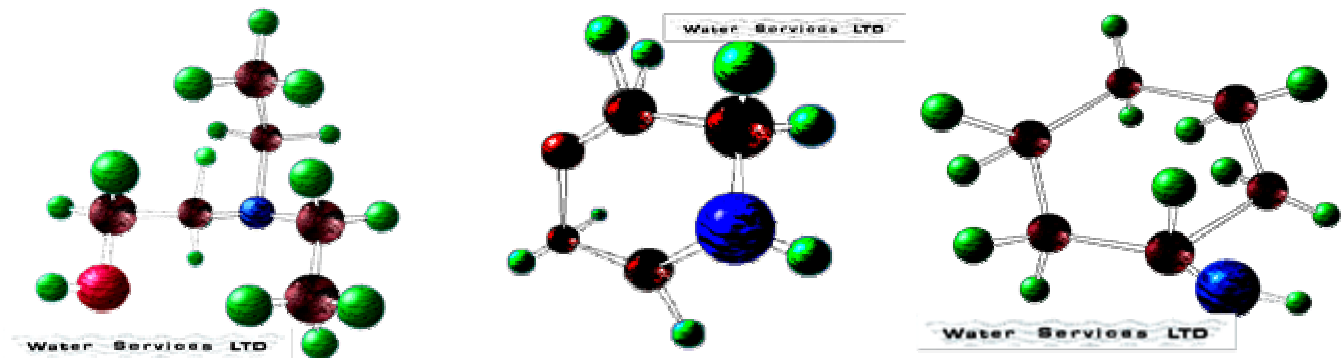
**WSB DEA** corrosion inhibitor is highly effective family of neutralizers, for treatment of feedwater, boilerwater and the after boiler sections of steam generating systems.

**WSB DEA** is designed for medium to high mileage of industrial steam circuits, used for process heating, and which can include turbines and other devices for power production.



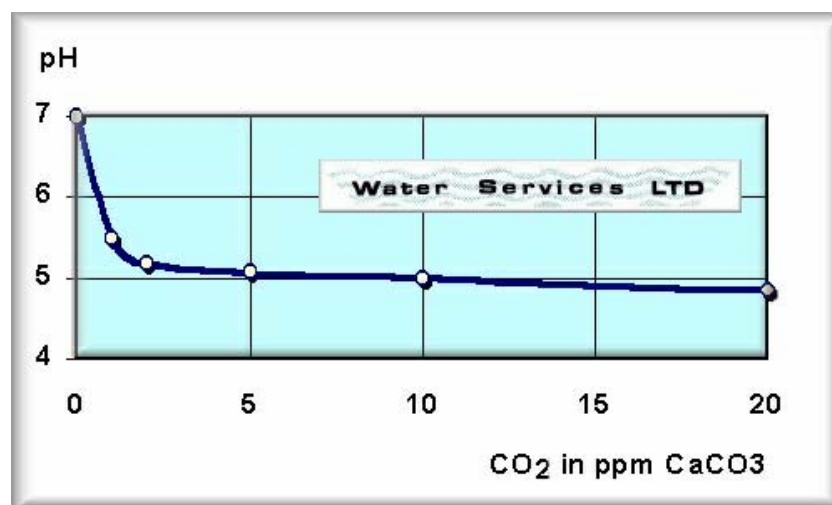
### Features

**WSB DEA** contains balanced mixture of amino-di-ethyl-ethanol, morpholine and cyclohexylamine, which elevates the system pH and thus compensates for the decrease in pH caused by the bicarbonate content in the water.



The bicarbonate decomposes in the boiler to carbondioxide and eventually carbonic acid which results in low pH in the condensate.

Through dosage of the volatile product **WSB DEA** a corrosive low pH in the condensate can be avoided.



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**WSB DEA** is a product line of mixtures of neutralizing amines, based on Diethyl amino Ethanol, including Morpholine and cyclohexylamine in the formulations.

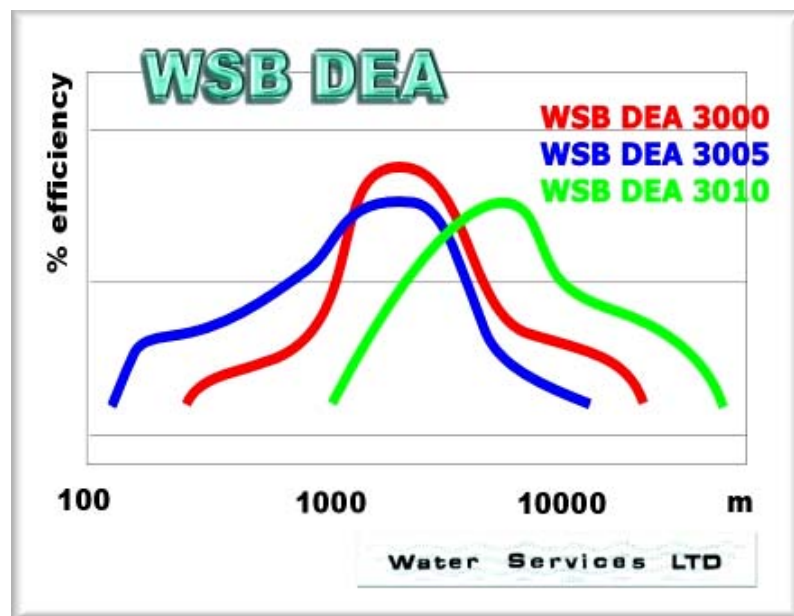


Morpholine, has the greatest potential to condense in the first condensate formed, at which time it will neutralize any carbon dioxide dissolved in this same first condensate. It can, therefore, offer the greatest protection in relatively small systems, or in areas within a system where steam first condenses.

Conversely, Cyclohexylamine, which has a relatively high distribution ratio, travels farther in the steam and reaches areas beyond those in which steam first condenses, thus affording better protection to large

systems.

Diethyl amino Ethanol has an intermediate distribution rate, making the **WSB DEA** formulations suitable for both short and large systems, very common in the chemical industry.



**Product selection according to systems' mileage**

## Feeding

The product dosage rate will depend on system design, water characteristics and operational parameters.

The product should be dosed into the system at the suction side of the feedwater pump or below the surface in the feedwater tank.

Suggested dosing rate is to obtain pH 8,5-9,3 in the condensate.



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# WSB DEA

## Handling precautions

Wear suitable protective gloves and safety goggles. In case of contact immediately flush with plenty of water. After eye contact seek medical advice. In case of spillage absorb with sand or other absorbent materials and sweep up. Then flush the area with water. Before use, review the Material Safety Data Sheet for additional information.



## Transport classifications

A.D.R. : none  
IMDG : none  
U.N.nr. : none

## Labelling for handling

Symbol : (Xi), Irritant  
R-phrases : 36/38  
S-phrases : none

## FDA / USDA regulations

**WSB DEA** can be used under FDA / USDA restricted plants, or when the steam can contact directly food or edible products, when the amine content in the steam is less than 15 ppm.

## Packaging

**WSB DEA** is packed in 30 kg pails or 220 kg PE drums.

