

HYDRO 525

NEUTRALIZING AMINE

General Description

Hydro 525 is a combination of neutralizing amines having different distribution ratios, provides maximum protection throughout the entire steam condensate system against corrosion attack caused by carbon dioxide, rapidly volatilizes and is distributed through the system with the steam. A less volatile component neutralizes carbonic acid formed at those portions closest to the boiler, while the more volatile component tends to carry further and protects the more distant parts of the system.

Features

Is a stable organic amine, the vapour pressure characteristics of which give maximum protection at lowest cost.

- Recycles through the steam system and requires no special dosing equipment.
- Increases the pH throughout the entire steam and condensate cycle.
- Eliminates the corrosion effect of carbon dioxide in the steam and water by the process of neutralization.
- Has no flash point.

Properties

Colour	Clear liquid
Odour	Ammonia
Specific Gravity	0.89-0.99 @ 20°C
pH	>12.0

Designed for

Economic control of corrosion in steam and condensate systems.

Direction for use

Hydro 525 is usually added to the boiler with the normal boiler water treatment chemical. It then steam distilled and condensate with the steam so that the condensate is rendered alkaline.

Upon being fed back into the boiler, it again volatiles and re-cycles throughout the system.

Effective control can be established by an initial dose of 20 ppm based on the total volume of the boiler and condensate system.

Subsequent dosage is made to maintain the pH at the required level operation costs are extremely low, provided steam losses, etc. Are kept down. The pH of the condensate can be simply regulated by the amount of **Hydro 525** used, and is usually kept between 8.3 and 9.0.

In this pH range, the protective value is at a maximum for both steel and copper alloys. At pH values above 10, the compound may become slightly corrosive to copper based alloys but only if they are under stress and are in the presence of oxygen.

Such a condition should never arise as the use of this materials is so easy to control.

Special note :

- (1) Dosing of oxygen scavenger and neutralising amine simultaneously. A mixture containing 5% by weight of Hydro 351 and 5% by weight of **Hydro 525** is stable and can be used as a stock solution to dose both chemical at the same time.
- (2) **Hydro 525** is usually only used in those system which are reasonably tight and in which make up does not exceed 20%.

Hydro-Chem Pty. Ltd

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Precautions

Handling

As the material is alkaline, prolonged or repeated contact with the skin may cause irritation, and should be avoided.

Regulatory Status

Hydro 525 complies with FDA regulations (21 CFR 173.310) for boiler water additives used in the preparation of steam that will contact food, provided the concentration of free amine does not exceed 10 parts ppm.

Packaging

Plastic container with net weight 25 kgs

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