

SHIELD BO 93

STEAM CONDENSATE BOILER TREATMENT

DESCRIPTION

SHIELD BO 93 is a blend of neutralizing amines with selected stability and vaporization characteristics that can be used in a wide range of boiler condensate systems to protect piping from acid attack.

The product is volatile and follows the steam where it quickly neutralizes the acidic components of the steam. The distribution ratios of the amines provide controlled protection at points of initial condensation and in the extended areas of a complex steam condensate system. This reduces the pickup of iron and copper corrosion products.

The product active ingredients are in the positive list of FDA 21 CFR 173.310 as substances authorized for the preparation of steam that will contact food, except for milk products.

APPLICATIONS AND DOSING

The dosing of SHIELD 93 will depend on many factors such as the amount of steam carbon dioxide, steam production and distribution line extension.

Usually the feed rate is regulated by the pH, which should be higher than 8,0 – 8,5 to assure complete neutralization reaction.

TECHNICAL DATA

Appearance:	Transparent, colorless to slightly yellow.
Odor:	Amine
pH (20 °C):	11,5 – 12,5
Density (20 °C):	0,98 ± 0,05 g/cm ³
Freezing point:	< 5 °C
Solubility:	Totally miscible in water

INSTRUCTIONS

SHIELD 93 should be added continuously and directly from the original container by means of a metering pump in the feed water line, in the steam line or to the boiler. It can also be mixed in a chemical feed tank with other products required to complete the treatment program.

For dilution use good quality water (make-up or condensate).

STORAGE, SAFETY AND TRANSPORT

SHIELD 93 is an alkaline product for industrial use and the typical precautions of handling these products must be adopted.

Avoid contact with skin and eyes. In case of contact wash immediately the zone affected.

For further information, refer to the material safety data sheet.

Store SHIELD 93 in the original container. Keep container tightly closed and maintain at ambient temperatures: 0 - 40°C. Keep protected from direct sunlight.

FURTHER INFORMATIONS

Our recommendations regarding our products are based on in-depth tests developed by our Technical Department.

They are given in good faith and no liability can be derived from them.

Always read the label and product information before use.