

## Cetamine® V 2100

### Organic corrosion inhibitor for steam boilers treatment

#### APPLICATION

Cetamine® V 2100 is an organic product that forms a protective film on metal surfaces and protects steam boilers from corrosion. Thanks to the separation coefficient between the volatile and liquid phases, the product is used to protect steam and condensate systems. Cetamine® V 2100 prevents scale formation in boilers because of its effective properties of water hardness stabilization and dispersion. In steam boilers, the product can only be used when the water is softened or after reverse osmosis systems.

#### SPECIFICATION

Cetamine® V 2100 is a liquid product consisting of film-forming polyamines, neutralizing amines and organic copolymers.

Form:	yellowish liquid
Density (20 °C/68 °F):	1,01 ± 0,03 g/m <sup>3</sup>
pH (1% раствор):	11,8 ± 0,3
Точка замерзания:	-1 ± 1 °C
Растворимость в воде:	the product is not recommended to be diluted

#### IMPACT ON THE ENVIRONMENT

Please read the safety data sheet.

#### ACTION

The process of corrosion prevention with the Cetamine® V 2100 is based on the following:

1. The Cetamine® V2000 forms a protective film of amines on metal surfaces.
2. Neutralizes carbon in steam and condensate.
3. The Cetamine® V 2000 regulates the pH level of feed water and condensate water by passivation of carbon steel and copper.

Thanks to the stabilization and dispersion function, the Cetamine® V2000 does not allow scale to form, blocking crystal growth (*Threshold effect*). As a result of stabilization, the amorphous deposits are broken and do not form scale. This protects all parts of the system. These sediments are removed from the system during the drainage process.

#### DOSAGE

The dosage depends on a number of factors, e.g. concentration, water hardness, total alkalinity, chloride content, temperature, time delay index and suspended salt content.

The concentration of Cetamine® V 2100 in feed water is recommended to be maintained at the level of 15-150 g/m<sup>3</sup>.

The dosage is selected so that the pH value of the concentrate would be at least 8.2.

#### USAGE

The Cetamine® V 2000 should be fed into the feed tank or feed water piping. The product is introduced into the system by automatic dosing. The dosage is dependent on the amount of softened feed water. Cetamine® V 2000 is dosed undiluted.

All parts of the dosing system should be made of the following materials: PVC pump valves, Teflon diaphragms, EPDM or Teflon gaskets, polyethylene dosing hoses.

The product must not be used in systems where Viton parts are present. The product is intended for industrial use only.

#### STORAGE

The Cetamine® V 2000 should be stored at room temperature in a tightly closed packaging.

#### ANALYTIC CONTROL

The required amount of Cetamine® V 2100 in the system is determined by measuring the concentration of polyamines in the feed water or condensate. For this purpose, the titration method or photometry method is used.

In addition, the required product dose can be checked and selected by measuring the pH value: pH must be at least 8.2.

#### SAFETY

Please read the safety data sheet. The expiry date is indicated on the label.