

Cetamine® V217

An organic corrosion inhibitor for steam boilers

APPLICATION

Cetamine® V217 is an organic corrosion inhibitor for steam boilers. It is an organic product that forms a protective film on the metal surface and protects steam boilers from corrosion. Since the product is easily transferable from liquid to volatile phase, it protects both steam pipes and condensate lines.

Cetamine® V217, by stabilizing stiffness and dispersing deposits, protects the boiler surface from deposits. The product can be used even where water is injected into the steam (to regulate steam parameters). It is used in steam boilers that are replenished with softened, demineralized water and is designed to protect steam boilers where steam is used for food industry purposes (in the process of food production or for heating food). The product complies with the provisions of the Law on Medicines and Cosmetics and other regulations for food additives, including FDA 21 C.F.R., paragraph 173.310.

SPECIFICATION

Cetamine® V217 is a liquid product consisting of film-forming and neutralizing amines.

Form:	yellowish liquid
pH (1% deionized water):	12,0 ± 0,5
Density (20°C/68 °F):	0,98 ± 0,03 g/cm ³
Freezing point:	(-15 ± 1)°C
Ability to dissolve:	the product is not recommended to be diluted

IMPACT ON THE ENVIRONMENT

Please read the safety data sheet.

ACTION

The process of corrosion reduction with Cetamine® V217 is based on the following:

1. Cetamine® V217 on a metal surface forms a protective film of amines.
2. Neutralizes carbon in steam and condensate.
3. PRegulates the pH level in feed water and condensate water by passivation of carbon steel and copper according to the Pourbaix program.

Thanks to the stabilization and dispersion function, the Cetamine® V217 does not allow scale to be formed, blocking crystal growth (*Threshold effect*). As a result of stabilization, the created amorphous deposits are broken and

do not form scale. This protects all parts of the system. These deposits are removed from the system during drainage.

DOSAGE

The dosage depends on a number of factors, e.g. concentration, water hardness, total alkalinity, chloride content, temperature, time delay index and suspended solids and should be selected with the help of ŠOMIS specialists. In most cases it is recommended to dose Cetamine® V217 (15÷100) g/m³ into feed water. The dosage should be selected so that the pH value of the concentrate is at least 8.2.

USAGE

The Cetamine® V217 must be fed into the feed tank or feed water piping. The product is added to the system by automatic dosing. The dosage depends on the amount of feed water. Cetamine® V217 is dosed undiluted. All parts of the dosing system should be made of the following materials: pump valves made of PVC), diaphragms made of Teflon, gaskets made of EPDM or Teflon, dosing hoses made of polyethylene. The product can not be used in systems with Viton. Product is only suitable for industrial use.

STORAGE

Cetamine® V217 необходимо хранить при комнатной температуре в плотно закрытой таре.

ANALYTIC CONTROL

The required amount of Cetamine® V217 is set in the system by measuring the concentration of polyamines in the feed water or condensate. For this purpose, the titration method (Heyl) or photometric method (A 17E-Amin I or A 18E-Amin II) is used.

In addition, the required dose of Cetamine® V217 can be checked at a pH value of at least 8.2.

SAFETY

Please read the safety data sheet. The expiry date is indicated on the label. The maximum allowable quantity of Cetamine® V217 in the food industry is 142 mg per 1 kg of feed water.