

## DESCRIPTION

**EC-2** is based on volatile amine. It is an effective inhibitor for steam boilers and condensate return lines. It is used for to protect systems from oxygen and carbon dioxide corrosion.

Working mechanism of EC-2 is as follows:

It reacts with dissolved oxygen in steam boilers and prevents the formation of carbonic acid. This way it protects the steam lines and avoids transportation of Fe<sub>2</sub>O<sub>3</sub> (rust) transportation to the boiler.

Trade Name	: <b><u>EC-2 (CONDENSATE CONTROL)</u></b>
Document No	: SP-KS-002
Chemical Name	: Water conditioning (Chemical Mixture)
Usage	: Anti corrosive for steam lines

## A. ORGANIC PROPERTIES

Appearance

Physical State (20°C) : Liquid

Color : Transparent liquid

Odor : Amine odor

## B. PHYSICAL PROPERTIES

pH : 11.0 – 13.0

Molecular weight : -

Explosion Limit : None

Flash point : None

Relative Density : 1.00 – 1.05 g/cm<sup>3</sup>

Solubility : Completely soluble in water.

## APPLICATION, FEATURES & BENEFITS

- ✓ In regular use, it prolongs the lives of both lines and condensate stops by preventing corrosion and perforation within condensate lines (steam lines) and therefore provides significant energy saving.
- ✓ In regular use, it prevents abrupt stops, explosion, perforation, blocking and provides both time and money saving without requirement of extra cleaning process in periodical maintenance.
- ✓ In regular use, it provides most efficiency from the steam by keeping the steam quality at maximum.

## **STORAGE INFORMATION**

Packed in original plastic jerry cans of 25-30-60-200 L. Storage period is 3 years.

## **DIRECTIONS FOR USE/APPLICATIONS & DOSAGE RATES**

If there is no chemical in boiler for condensate control, first dosage for EC-2 is 250 g/ton water. Afterwards, whenever you feed boiler with water dosage 50-100 grams/ton. The most ideal dosing places are the steam collector feeding water inlet line, water station of the degasser or condensate (hot well) tank. To provide continuity at the system, EC-2 is recommended to be dosed by means of the dosage pump.

## **TEST METHOD**

**pH Test:** It is desired that the ideal pH range to be between 8.0 - 9.0 in the tests performed. This pH range is the range where the system (steam lines) work in the most ideal and convenient manner.

**Conductivity:** As the conductivity value is smaller, the quality and purity of the steam and life of the condensate stops get longer. It is important to have this value below 50  $\mu\text{S}/\text{cm}$ . This value will provide a longer life for the system (durable) and for better steam quality. Conductivity can be kept under control by means of a conductivity meter.

**NOTE:** Since, purified water is used during the production of ERTEK EC-2, you'll have significant advantages like no extra chloride and hardness will be added to the system with the dosage of EC-2.