DESCRIPTION

EC-2H is an amine based efficient boiler and condensation line oxygen scavenger to prevent oxygen corrosion to form in the boilers and steam lines. When it reacts with the melted oxygen within the boiler water, it increases pH by condensing in the condensate return line. It generates an oxide layer on cupper, iron and non-iron surfaces. Discontinuous usage and/or wrong dosage control of hydrazine concentration will not provide proper protection for the boiler system.

Chemical Name	: Water conditioning (Chemical Mixture)
Document No	: SP-KS-004
Trade Name	: **EC-2H (OXYGEN CONTROL)**
Usage	: Anti corrosive for boiler and steam lines

A. ORGANIC PROPERTIES

Appearance

Physical State (20ºC) : 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 : $1.02 – 1.10$ g/cm^3

Solubility : Completely soluble in water.

APPLICATION, FEATURES & BENEFITS

✓ In regular use, it ensures maximum physical life of both lines and condensate stops by preventing corrosion and perforation within condensate lines (steam lines) and therefore provides significant energy savings. (1 mm corrosion debris causes 15-18% dissipation, that means more consumption of oil.)

✓ 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, as it will inhibit oxygen transfer to the steam lines, it provides most effective output from the

steam by keeping the steam quality at maximum and prevents pitting in the condensate lines.

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✓ 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

For the low and medium pressure systems, EC-2H anti-corrosive has to be added to the feeding pump inlet or outlet port, hot well or any other suitable place with the pumping system continuously. When a tank/flow meter device is used, in order to avoid evaporation of the product, the chemical feeding line must be at least 1 meter (3 feet) under the water level. For the high pressure boiler systems of 60 kg/cm^2 (850 psi) and more, EC-2H anti-corrosive must be added to the outlet of the hot well or feeding pump inlet. EC-2H anti-corrosive can also be added to the high pressure/low pressure turbine passage. The ideal feeding amount for the first application –i.e. to saturate the boiler with the substance, is 250 g EC-2H for 1 ton of water, subsequently 100-150 g EC-2H for 1 ton of water. If 10 tons of feeding is performed daily, 1.0-1.5 Kg/day must be fed to the boiler. When EC-2H anti-corrosive additive is started to be dosed to a system where no de-oxidizer has been used or sodium sulfide was used previously, is recommended to deep bluff the system at least 2 times (for 3-5 seconds) in a day during the first two months. This cleaning process provides cleaning of the iron oxides in the feeding water system which is caused by EC-2H anti-corrosive. EC-2H coverts rust to iron oxide to make the cleaning.

TEST METHOD

Determined by performing **Hydrazine test**.

In low pressure boilers (0-20 atm), 0.1-0.3 ppm hydrazine is sufficient.

In medium pressure boilers (20-40 atm), 0.1-0.2 ppm hydrazine is sufficient.

In high pressure boilers (40-100 atm), 0.05-0.1 ppm hydrazine is sufficient.

When values below or over these values are observed, dosing can be stopped and partial bluffing can be made or the dosage can be increased respectively.

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