

ProPure Gen

Steam generator scale and corrosion inhibitor.

Description

ProPure Gen product is an additive for Steam Generators. By dosing it into the steam generator water at specific rates, it prevents scale, sludge and corrosion that may occur inside the generator. It is a complete product. It controls oxygen corrosion and scaling in the generator water, as well as balancing alkalinity.

Directions For Use/Applications & Dosage Rates General Cleaning

If the ProPure Gen steam generator water is devoid of preservative or has been changed, a one-time shock treatment (saturating the boiler with the preservative) is applied at a rate of 150 grams per ton of water, followed by 50-100 grams per ton of added water. The ideal dosing locations are the feedwater inlet line, the degasser's water compartment, or the condensate (hotwell) tank. We recommend using a dosing pump for continuous application.

TEST METHODS

PHOSPHATE TEST: This test is performed to assess the adequacy of the presence of the applied ProPure Gen in the boiler. It helps control hardness, sludge, and scaling. A phosphate level of 5-10 ppm is sufficient. If the phosphate level is high, the system should be partially blown down to the ideal level; if the phosphate level is low, the dosage should be increased accordingly.

CHLORIDE TEST: This test is performed to check for seawater leaks in the system or to measure salinity levels. Let's adjust the chloride level to a maximum of 300 ppm.

Above these values, in the presence of chloride, the system should be blown down to the lower values.

ALKALINITY TEST: The alkalinity test helps us determine the accuracy of the pH value in water. It moves in direct proportion to pH. The alkalinity ratio determines the ideal phosphate ratio depending on the pH of the water. In generator water, 300 ppm p. alkalinity should be the maximum limit. If alkalinity exceeds this value, the system should be brought to the ideal range with partial blowdown.

NOTE: If the alkalinity level in boilers supplied with high-quality (demineralised) water does not reach the desired range, our company's product ProPure pH (Alkalinity Control Solution) can be used. Adding 10 grams (10 ppm) of ProPure pH product to a ton of water will give the water 5 ppm of alkalinity.

Boiler Water Treatment

Summary

- Regular use prevents limescale and corrosion that may occur inside the generator, resulting in significant energy savings.
- Regular use prevents sudden stops, explosions, punctures, and blockages, and saves both time and money by eliminating the need for extra cleaning during periodic maintenance.
- Since generator systems are machines that produce steam quickly with little water, they are sensitive systems, and the use of ProPure Gen ensures that these systems and heating pipes have a maximum lifespan.

A) Organic Properties

Appearance

Physical State (20°C): Liquid
Color : Colourless, yellowish
Odor : Amine odor

B) Physical Properties

pH : 9.0-11.0
Molecular Weight : -
Explosion Limit : N/A
Flash Point : N/A
Density : 1.05-1.15 g/cm³
Solubility : Completely soluble in water.

Storage Conditions

Packaging Type : 25-30-200 liters original plastic drums
Storage Period : 2 years

Approvals & Certificates



Product No : SP-KS-011

HARDNESS TEST: This test is performed to measure whether there is any hardness leakage in the water. It is measured in terms of CaCO_3 . It is recommended that the system water hardness value does not exceed $5\text{F} = 50$ ppm, therefore the system should be fed with distilled (demineralized) water or treated water. If fed with hard water, a phosphate level of 15-20 ppm must be maintained in the tank.

pH: An indicator of the acidity and alkalinity of water. The ideal pH range for generator water is 10.5-11.5.

NOTE: In generator water systems, if the generator is stopped intermittently, a certain amount of water should be removed via bottom blowdown before restarting it, and an equal amount of water and chemicals should be added. Since generator circuits produce steam with limited water, they are sensitive systems, and this blowdown ensures that any solid particles that may have settled at the bottom are removed before they stick and are roasted by the heat.