



PRODUCT BULLETIN

SPEC HIB 8500

Oxygen Scavenger / Corrosion Inhibitor for Boiler Systems

General Description

SPEC HIB 8500 is an efficient and safe oxygen scavenger when used in glycol re-boiler systems at operating conditions. This formulation is particularly suitable for wet-conservation during shutdowns. De-oxygenation rates at 55°C and pH 9 (700 ppb oxygen scavenger for 125 ppb O₂). At boiler's operating conditions, **SPEC HIB 8500** performs optimally. In theory, 1.24 ppm **SPEC HIB 8500** are required for the removal of 1 ppm O₂, however, 3 ppm **SPEC HIB 8500** per 1 ppm O₂ are recommended in practice.

Passivation

As a strong reducing agent, **SPEC HIB 8500** can convert porous and permeable hematite (rust) to magnetite, a protective coating that will reduce further corrosion. Passivation tests performed at pH 8 and 5000 ppm oxygen scavenger on pre-corroded coupons have shown that **SPEC HIB 8500** performs optimally when compared to other alternatives.

Steam-condensate line protection

With a volatility comparable to neutralizing amines **SPEC HIB 8500** has the added advantage of being distributed all along the steam condensate circuit ensuring therefore a total control of the corrosion by elevating the pH and neutralizing carbonic acid. Volatility is defined by the vapor-liquid distribution ratio, or the ratio of the product concentration in steam relative to its concentration in the condensate.

Physical Properties

Appearance / Odor	Amber Liquid / Amine Odor
Specific Gravity	0.89 - 0.91
pH	8.0 - 12.0
Flash Point	115°F
Vapor Density	3.1

Availability

SPEC HIB 8500 is available in 5 gallon pails, and 55 gallon drums and bulk quantities.

Health and Safety

SPEC HIB 8500 is one of the safest oxygen scavengers on the market today. LD₅₀ oral, rat = 2190 mg/kg. It is a low toxicity material and upon decomposition do not release toxic or solid by-products. However, **SPEC HIB 8500** is flammable and harmful by inhalation or skin contact. So appropriate handling measures should be followed. The material's MSDS has to be consult before any use.

Handling

Observe warning label on product container. Normal precautions for industrial chemicals apply.