



Steamate™ NF2400 Condensate Corrosion Inhibitor

- Reduces condensate corrosion and iron levels
- Reduces boiler feedwater iron
- Extends life of condensate system

DESCRIPTION AND USE

Steamate™ NF2400 is a blend of a straight chain primary filming amine and a neutralizing amine, fed to reduce condensate corrosion. The product provides a protective film on metal surfaces to inhibit penetration by corrosive substances. Steamate NF2400 is effective for the control of condensate corrosion. It can effectively reduce feedwater iron.

TYPICAL APPLICATIONS

When applied to the boiler condensate system, Steamate NF2400 protects metal surfaces from corrosion caused by oxygen and carbon dioxide. The filming amine forms a film between the metal and the condensate, thus restricting the damaging effect of dissolved gases.

Condensate corrosion is primarily caused by the presence of carbon dioxide and oxygen. Feedwater alkalinity decomposes in the boiler to produce carbon dioxide which is evolved with the steam. This gas dissolves in condensate to produce carbonic acid. Oxygen is present in the steam because of improper deaeration or air leakage into the system. Both gases can produce damaging metal loss.

Steamate NF2400 provides a filming amine that, when applied to a condensate system, establishes a monomolecular protective barrier. The nonwetable metal surface is thus protected from oxygen or carbonic acid attack. The product also contains a neutralizing amine which serves to evenly distribute the film and produces uniform protection.

TREATMENT AND FEEDING REQUIREMENTS

Feed Point - Feed continuously and directly to the steam using a stainless steel injection nozzle. Injection into feedwater or boiler water is acceptable under certain circumstances.

Feedrate - Use in accordance with control procedures GE Betz establishes for a specific condition. Rates can range between 5 and 20 mg/L.

Dilution - Use warm condensate (80°F to 125°F [27°C to 52°C]) to produce a 1 to 10 percent solution. Do not use raw water or boiler water. Do not mix with reducing agents.

Equipment - Feed equipment should be all stainless steel. Filming amines should be fed using the injection nozzle for vapor streams.

GENERAL PROPERTIES

Physical properties of Steamate NF2400 are shown on the Material Safety Data Sheet, a copy of which is available on request.

PACKAGING INFORMATION

Steamate NF2400 is a liquid blend, supplied in 55-gallon (208-L), nonreturnable steel drums. In addition, it is available under the GE Betz ChemSure™ Delivery Service for contracted quantities within certain geographic areas.

SAFETY PRECAUTIONS

A Material Safety Data Sheet containing detailed information about this product is available on request.