
T E C H N I C A L P R O D U C T B U L L E T I N

**CATALYZED
SULFITE**

Description

CATALYZED SULFITE is used to prevent corrosion in a steam-generating system by removing dissolved oxygen from feedwater and boiler water. CATALYZED SULFITE reacts with oxygen in water almost instantaneously, even at low temperatures. This quick reaction protects the boiler and the pre-boiler where mechanical deaeration is incomplete.

Composition

CATALYZED SULFITE consists of sodium sulfite and specially selected catalytic agents that do not interfere with boiler operations.

Properties

Appearance:	Brown free flowing powder
Density:	46 pounds per cubic foot
Solubility:	20% at 75°F
pH of 1% solution:	9.5 to 10.5

Dosage

The recommended dosage is 12 parts per million (ppm) of CATALYZED SULFITE for each millimeter of dissolved oxygen in the feedwater, plus the concentration needed to maintain a small excess of sulfite in the boiler.

Feeding

A continuous feed of 5–10% solution into the pre-boiler section or direct to the boilers is an ideal method. The CATALYZED SULFITE solution must be covered with a float to minimize air contact. This product is suitable with other boiler water-treating chemicals except for phosphate.

Testing and control

Pariser sulfite testing equipment is needed to run the necessary control test. The dosage of CATALYZED SULFITE is regulated to maintain an excess of 30–50 ppm of sulfite as SO₃ in the boiler water. For boilers operating at pressure over 600 pounds per square inch gauge (psig), it may be necessary to maintain a smaller excess.

Handling

Special handling precautions are not required. However, avoid inhalation of dust and ingesting the solution. Store in a dry place with the lid securely closed on the container.

FDA Information

The Federal Food and Drug Administration has no objection to the constituents used in the manufacture of CATALYZED SULFITE for treating boiler water where the steam directly contacts food products.

Restrictions

CATALYZED SULFITE is not recommended for use if the boiler water steam is in direct contact with dairy, brewery, distillery, or pharmaceutical products.

Packaging

CATALYZED SULFITE is available in 100- and 400-pound fiber drums.