

# Product Technical Data

## AQUA-SHIELD 221 Steam Boiler Corrosion Inhibitor

### HIGHLIGHTS

AQUA-SHIELD 221 corrosion inhibitor is an essential component maintenance protection program of the boiler and after boiler systems.

This product a blend of sulphite and performance enhancement catalyst compounds. These prevent corrosion in steam generating systems by removing dissolved oxygen from feedwater and boiler water.

AQUA-SHIELD 221 reacts almost instantaneously even at low temperatures with any oxygen present in feedwater, preventing it from accelerating corrosion in the boiler, steam and condensate systems.

### TYPICAL PROPERTIES

- Appearance: Off-white to tan pink powder
- Density 1.2 – 1.4
- Solubility 20% at 20°C

### PRIMARY APPLICATIONS

The primary feed point for steam boilers is continuous to the deaerator storage vessel via stainless steel injection quill. Alternate location is the feedwater line.

### FEEDING & CONTROL

AQUA-SHIELD 221 should be dissolved in a site mixing tank, and the solution injected to boiler or pre-boiler added using a chemical metering pump with liquid end constructed of suitable materials.

These include PVC, polypropylene, Viton, Teflon and stainless steel.

The dosage will depend on the operating conditions and the chemistry of the water being treated. The normal dosage of treatment is regulated to maintain an excess of 30 – 50 mg/L of sulphite as SO<sub>3</sub> in the boiler water

Technical field specialist will recommend the most appropriate dosage for your particular application on an ongoing basis.

### PRODUCT REGISTRATION

AQUA-SHIELD 221 is registered to the NSF Nonfood Compounds Registration Program for Boiler treatment products – all food processing areas/food contact (G6 Category).

FDA acceptable in accordance with 21 CFR Section 173.310- Boiler water additive.

Halal certification by MUI.

### THE BENEFITS

- Avoid unscheduled shutdown due to corrosion problem in the boiler, steam and condensate systems.
- Extended equipment life.
- Suitable for food industries

### COMMON APPLICATIONS

- Automotive industries
- Packaging facilities
- Pharmaceutical
- Food Industries
- Pulp & Paper processing
- Timber processing

### PACKAGING

- 25kg open top pails with sealed lid

### HANDLING & SAFETY

AQUATEC maintains a database of safety data sheets (SDS) on all our products. These contain health & safety information to assist in the safe and appropriate chemical handling, ensuring the protection of personnel.

