



## **BDS – 6500**

### **Microbiocide -Biodispersant**

#### **Usage:**

**BDS-6500** microbiocide is a broad spectrum, antimicrobial product designed specifically to control slime forming bacteria, sulphate reducing bacteria and algae in industrial recirculating cooling water systems.

**BDS-6500** can be used over a wide pH and temperature range and releases no odor or foam at the indicated levels.

As for the active ingredient, **BDS-6500** is a concentrated solution of Glutaraldehyde.

#### **Technology:**

##### **Glutaraldehyde**

Chemically, the cell walls of bacteria contain a unique protein, which, specifically, is a combination of different amino acids. The amino groups are typical organic bases and effective nucleophilic compounds.

Glutaraldehyde reacts with the proteins of the bacterial cell wall and the proteins within the internal portions of the cell via a nucleophilic substitution reaction. The reaction will be internal or external depending upon the pH of the water.

#### **Activity:**

**BDS-6500** shows particular strength in controlling sulfate reducing bacteria. Published literature specifically points out the combination of glutaraldehyde and isothiazolone as being very effective in the control of this troublesome bacteria.

**BDS-6500** is also unaffected by oil contamination, making it a popular toxicant in refinery and oil production applications.

In reviewing the mode of microbiocidal action of **BDS-6500**, it is evident that it shows efficacy over a wide pH range. The ability of this material to work more rapidly at high pH makes it a popular choice in alkaline cooling water systems.

#### **Feeding:**

The quantity of **BDS-6500** required for any give application will depend on such factors as the type and volume of the system, the extent of microbiological contamination and the degree of control required.

**BDS-6500** may be directly fed from the drum or diluted with water and fed by any suitable chemical feed system.

**BDS-6500** should be dosed directly into the sump or basin or any location where good distribution can be assured.

#### **Handling precautions:**

Wear suitable protective gloves and safety goggles. In case of contact immediately flush with water. After eye contact seek medical advice.

Small spills can be flushed with water. Large spills should be collected for disposal.

Before use review the Material Safety Data Sheet for additional information.