



Bioguard 4450

DESCRIPTION

This product has been designed specifically for control of sulfate-reducing bacteria (SRB) that contribute to souring, the production of sulfide, and abiotic corrosion in oil field systems, gas production and transmission pipelines and systems.

A micro-biocide for use in controlling sulfate-reducing bacteria and slime forming bacteria in oil well drilling, oil field processing applications, oil field water systems, oil and gas productions and transmission pipelines and systems, and gas storage fields and equipment; such as steam-injection water holding tanks, flood water, injection water, holding pond water, disposal-well water, water holding tanks, fuel storage tanks and related refinery and oil field closed, industrial re-circulating water handling systems.

A highly effective micro-biocide for use in controlling bacteria including slime forming bacteria and sulfate-reducing bacteria (SRB) and fungi (yeast and molds) and algae in air washers and industrial scrubbing systems, re-circulating cooling and process water systems including those that contain reverse osmosis membranes and in service water and auxiliary systems and heat transfer systems and in wastewater systems including wastewater sludge and holding tanks.

This product is efficient and stable in use dilution.

INSTRUCTIONS

Additions of this product must be made with the proper type of metering pump equipment, suction (low pressure) side of pumping equipment or similar device. This product can be added to the system by slug, continuous or on an intermittent basis, depending on the degree of system found

This product must be added to the water flood or salt water disposal system at a point of uniform mixing.

This product must be added to the water handling system at a point of uniform mixing such as the area of addition of make up water to the holding tank.

Method of Application:

1. **Continuous Injection:** Add this product at 30 ppm active (7.5 fluid ounces per 1000 gallons of water) when system is noticeably fouled. When microbial control is evident, add this product at 15 ppm active (3.75 fluid ounces per 1000 gallons of water) to maintain control.
2. **Batch Treatment:** Add this product at 180 ppm active (46.25 fluid ounces per 1000 gallons of water) over a period of 4 – 6 hours one or more times per week when the system is noticeably fouled. When microbial control is evident, add this product at 90 ppm active (23 fluid ounces per 1000 gallons of water) over a period of 4 – 6 hours one or more time per week.

FEATURES

- v Economical - high concentration
- v Broad spectrum kill

SPECIFICATIONS

Appearance: Clear Liquid
Odor: Low
Specific gravity: <1.0
pH: 7-8

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SECTION I

AI-SEALING LLC

5823 SAM HOUSTON PKWY N
HOUSTON, TEXAS 77041

Date: 10-19-11

Phone:

INQUIRY- (281) 520-9479

EMERGENCY- (800) 424-9300

HEALTH	1	0=Least
FLAMMABILITY	0	1=Slight
REACTIVITY	0	2=Moderate
		3=High
		4=Extreme

SECTION II HAZARDOUS INGREDIENTS/INFORMATION

HAZARDOUS COMPONENTS	CAS#	OSHA / PEL	ACGIH / TLV	OTHER / STEL	SK
Didecyl Dimethyl ammonium chloride	7173-51-5				6.25%

SECTION III -PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: >210 F F
Vapor Pressure (mm Hg): 58 mmm
Vapor Density (Air=1): >1
Solubility in Water: Soluble
Appearance and odor: Clear to yellow liquid with low odor.
Specific Gravity (H2O=1): 0.99
Melting Point: NA
Evaporation Rate: (Butyl Acetate=1) >1

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Not Flammable
Extinguishing Media: Carbon dioxide, dry chemical or alcohol foam
Special Fire Fighting Procedures: Vapors are heavier than air care should be taken to force air into room to remove vapors.
Explosion Hazards: Remove all sources of ignition prior to applying.
Flammable Limits: LEL: ND UEL: ND

SECTION V-REACTIVITY DATA

Stability: Stable
Incompatibility (Materials to Avoid): Oxidizers.
Hazardous Decomposition or Byproducts: carbon dioxide, oxides of nitrogen and carbon monoxide.
Hazardous Polymerization: Will not occur.

SECTION VI-HEALTH HAZARD DATA

Health Hazards (Acute and Chronic): Carcinogen effects
Routes of Entry, Signs of Exposure, and Symptoms of Exposure:
SKIN and EYES: May irritate extremely sensitive individuals. Possible irritant to eyes.
INHALATION: Vapors are harmful if inhaled.
INGESTION: Gastric pain and vomiting.
Medical Conditions Generally Aggravated by Exposure: Unknown
Carcinogenics: NONE
Emergency and First Aid Procedures:
SKIN & EYE CONTACT: Rinse skin with clear water. If irritation results, apply skin cream. For eye contact immediately flush with clear running water for 15 minutes. Get medical attention.
INHALATION: Remove to fresh air. If breathing does not return to normal, get medical attention.
INGESTION: Immediately drink large quantities of water. Get medical attention.

SECTION VII-PRECAUTIONS FOR SAFE HANDLING AND USE

SPILLS: Transfer to a container to dispose in accordance with federal and state regulations.
Handling and Storing: Keep container closed when not in use. Do not freeze. Follow label instructions.
Other Precautions: Keep this and all chemicals out of the reach of children.

SECTION VIII-CONTROL MEASURES

Respiratory Protection (Specify Type): None.
Ventilation: Mechanical: General Ventilation.
Protective Gloves: Rubber.
Eye Protection: Safety glasses.
Other Protective Clothing or Equipment: Not required.

SECTION IX-ADDITIONAL INFORMATION