EMATERIAL SAFETY DATA SHEET BIOCIDE_{G30}™

CHEMICAL STERILANT/DISINFECTANT

SECTION I – Distributor

Biotrol • 13705 Shoreline Court East • Earth City, MO 63045 • 1-800-822-8550

TRANSPORTATION DATA

DOT, IATA, IMO: Not regulated Hazard Class: None Labels: None needed Packaging, ID#, Special Instructions: None

SECTION II – Hazardous Ingredients/Identity

Hazardous Component(s)	CAS	OSHA	ACGIH	% w/v
(chemical and common names)	NO.	PEL	TLV	
2.65% Glutaraldehyde (active ingredient)	111-30-8	0.2 ppm	0.05 ppm	2.65%

SECTION III – Physical and Chemical Characteristics

Appearance/Odor: A clear, slightly yellow liquid with typical aldehyde odor and added lemon scent Boiling Point: 100°C/212°F Specific Gravity: 1.005 - 1.013 Vapor Density (Air=1): 1.1 Solubility in Water: Complete Molecular Weight: 100.11 (glutaraldehyde) Odor Threshold: 0.04 ppm, detectable (ACGIH)

SECTION IV – Fire and Explosion Data

Flash Point: None

Extinguishing Media: Carbon Dioxide, foam, dry chemical Unusual Fire and Explosion Hazards: None known Special Fire Fighting Procedures: Self-contained breathing apparatus and protective clothing should be worn when fighting chemical fires.

SECTION V - Stability and Reactivity Data

Stability: Stable

Hazardous Polymerization: Will not occur

Hazardous Decomposition or Byproducts: Thermal decomposition may produce carbon dioxide and/or carbon monoxide.

Conditions and Materials to Avoid: Alkaline (pH >10) and acidic (pH <3) materials catalyze an aldol-type condensation (exothermic but not expected to be violent). Avoid high temperatures above $40^{\circ}C/104^{\circ}F$ and/or evaporation of H₂0.

SECTION VI – Health Hazard Data

ROUTES OF ENTRY / SIGNS & SYMPTOMS OF EXPOSURE

Ingestion: May cause irritation and possibly chemical burns of the mouth, throat, stomach and esophagus. May produce discomfort in the mouth, throat, chest and abdomen, nausea, vomiting, diarrhea, dizziness, faintness, drowsiness, thirst and weakness.

Eyes: Solution contact may cause damage, including severe corneal injury, which could permanently impair vision if prompt first-aid and medical treatment are not obtained. Vapors my cause stinging sensation in the eye and excess tear production, blinking, and redness of the conjunctiva. **Skin:** Direct solution contact may cause skin irritation or aggravation of an existing dermatitis. May also cause skin to turn a harmless yellow or brown color.

Inhalation: Vapor is irritating to the respiratory tract. May cause stinging sensations in the nose and throat, chest discomfort and tightening, difficulty with breathing and headache. May also aggravate pre-existing asthma and pulmonary disease.

SECTION VII – Emergency and First Aid Procedures

Ingestion: D0 NOT INDUCE VOMITING. Drink large quantities of water and call a physician immediately. NOTE TO PHYSICIAN: Probable mucosal damage from oral exposure may contraindicate the use of gastric lavage. **Eyes:** Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention immediately and follow up with an ophthalmologist.

Skin: Immediately remove contaminated clothing and flush skin with soap and water for a minimum of 15 minutes. If irritation persists, seek medical attention. Wash or discard contaminated clothing.

Inhalation: Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen may be given by qualified personnel. If irritation persists, seek medical help.

SECTION VIII – Special Precautions for Handling and Spill/Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: Wear suitable protective equipment, including nitrile gloves, chemical-resistant gown or apron, and protective evewear (safety glasses or shield). A full face respirator, or half-face respirator with gas-proof goggles, both worn with organic vapor cartridges, is recommended for small spills and is essential for large spills, or if you experience discomfort (watery eyes, nasal or respiratory irritation) due to inadequate ventilation. FOR SMALL SPILLS OF 1 GALLON OR LESS, gather up a bucket, household ammonia, and a sponge or mop. Don protective equipment and mix approximately 1 cup of ammonia with 1 cup of water in the bucket. Mop or sponge the ammonia mixture into the spill until thoroughly combined (about 2 min.). Wipe or mop up resulting mixture and discard down the drain with a copious amount of water. Rinse bucket, mop or sponge with water, and give spill area a final wipe or mop with fresh water. Re-rinse all equipment and allow spill area to dry. FOR LARGE SPILLS OF MORE THAN 1 GALLON, remove people from immediate spill area, and isolate area until cleaned up. Don protective equipment including a respirator with organic vapor cartridges. Contain spill with absorbent material, i.e. towels. Add approximately 228 grams of sodium bisulfite powder per gallon of BIOCIDEG30 spilled (aqueous sodium hydroxide or ammonium hydroxide will also neutralize glutaraldehyde). With a sponge, mix neutralizing chemical into spill, and allow 5 minutes for deactivation to occur. Discard resulting mixture according to your facility's waste disposal guidelines. Mop spill area with fresh water. Rinse out all equipment with large amounts of water. If paper towels were used, dispose of in a tightly closed trash bag. Let spill dry, and if possible, increase ventilation. Once glutaraldehyde odor is below allowable levels (TLV), the area may be released from isolation. Waste Disposal Methods: Dispose of BIOCIDE_{G30} after 30 days of reuse, or the MEC indicator shows the solution is below its minimum effective concentration (1.7% w/v), whichever is sooner. This may be accomplished by pouring solution down the drain in accordance with state and local regulations. Flush with a large quantity of water. Do not reuse empty containers. Rinse thoroughly with water and dispose of in trash.

Precautions to be Taken in Handling and Storage: BIOCIDE_{G30} should be stored in its original sealed container at controlled room temperature (15°C/50°F to 30°C/85°C).

Precautionary Labeling: Avoid contact with eyes, prolonged and repeated contact with skin, and contamination with food.

SECTION IX – Special Protection Information/Control Measures

Eye Protection: Safety glasses, goggles or face shield recommended.

Respiratory Protection: None required if glutaraldehyde vapor levels are below TLV.

Ventilation: The working area should be large enough with ventilation necessary to keep the level of atmospheric glutaraldehyde below the Threshold Limit Value (TLV). If the solution vapors are irritating to the eyes and nose, the TLV is probably being exceeded, and additional ventilation may be necessary. A fume hood or self-contained fume absorber may be appropriate. Ventilation should pull fumes away from worker and towards the floor.

Skin Protection: Nitrile gloves and chemical-resistant gown or apron should be worn. Rubber boots may be needed to contain large spills.

Other Clothing and Equipment: Eyewash and full-face respirator, or half-face respirator with gas-proof goggles, both with organic vapor cartridges should be available for emergencies.

IMPORTANT

While seller believes that the information contained herein is accurate, such information is offered solely for its customers' consideration and verification under their specific use conditions. This information is not deemed a warranty or representation of any kind for which seller assumes legal responsibility.

BIOTROL

24-Hour Emergency No. 1-800-535-5053 QUESTIONS or COMMENTS? 1-800-822-8550

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