Section 1 - Product Identification

Biocide G30 is an aqueous, buffered glutaraldehyde solution. It has a slightly acidic pH (The pH is about the same as distilled water).

Distributed by:

Biotrol

13705 Shoreline Court East

Earth City, MO 63045

1.800.822.8550

Emergency Phone Number:

Infotrac:

24-Hour Number- (U.S.) 1-800-535-5053

Outside U.S.-352-323-3500

The Infotrac phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.

Section 2 - Hazards Identification

Overview: May be harmful if swallowed. Irritating to skin eyes and respiratory tract.

Safety Ratings

Health: Slightly Hazardous *Flammability:* None *Reactivity*: None *Contact:* Slight
Recommended safety equipment: safety goggles, lab coat and proper gloves
Storage: General storage
NFPA Ratings
Health = 1 Flammability = 0 Reactivity = 0

Potential Health Effects

The toxicology of this compound has not been completely examined. It is presumed that the toxicity of this item is similar to other aldehydes.

Inhalation: Irritating to respiratory tract. May cause stinging sensation in the nose and throat. Can also cause chest discomfort and tightening as well as headache and difficulty in breathing. May cause asthma-like symptoms and pulmonary disease in sensitive individuals.

Ingestion: Can cause irritation and chemical burns to the mouth, throat, esophagus and stomach. Can also cause nausea, vomiting, diarrhea, etc.

Skin contact: May cause skin irritation or aggravation of existing dermatitis. May cause temporary discoloration of the skin.

Eye contact: Vapors may cause stinging sensation and tearing. Solution contact can cause corneal injury which can cause visual impairment if not dealt with immediately.

Chronic Exposure: May be a sensitizer in some individuals.

Aggravation of preexisting conditions: May aggravate preexisting asthma and other lung diseases.

Section 3 - Composition/Information on Components

Ingredients	*CAS#*	*OSHA Pel*	*ACGIH TLV*	*Other Limits*	*%*
Glutaraldehyde	111-30-8	0.2 ppm	0.05 ppm		2.65% w/v

Biocide $_{G30}$ also contains proprietary buffers, surfactants and defoamers.

Section 4 - First Aid Measures

Inhalation: Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: **Do not induce vomiting**. Drink large quantities of fluids and call a physician immediately.
Note to Physician: Probable mucosal damage from oral exposure may contraindicate gastric lavage.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Get medical advice if irritation develops. Wash or discard contaminated clothing before reuse.

Eye Contact: Immediately flush thoroughly with running water for at least 15 minutes. Get immediate medical advice.

Section 5 - Fire Fighting Measures

Flash point: Not applicable.

Flammable Limits: Not applicable.

Fire: Not normally a fire Hazard.

Explosion: Not Normally an explosion hazards.

Fire Extinguishing Media: Any means suitable for surrounding fire.

Special information: Pyrolysis will release carbon monoxide.

Section 6 - Accidental Release Measures

Wear appropriate protective gear such as gloves, apron and protective eye wear. Absorb with a suitable absorbent (such as paper towels) and store in a suitable container for disposal. Large spills may be neutralized with sodium bisulfite (about 200 g/gallon), glycine or ammonia.

Section 7 - Handling and Storage

Store in a closed container at controlled room temperature, 59°F to 86°F (15°C to 30°C). Solution that is being reused should be stored in a tightly closed container and used in a room with adequate ventilation (i.e. at least ten changes of air per hour).

Section 8 - Exposure Control/Personal Protection

Airborne Exposure Limits: See section III.

Ventilation System: Use appropriate ventilation. If the vapor is irritating to the eyes and nose the threshold limit value is probably exceeded and additional ventilation may be needed. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

Personal Respirator: Not required unless the threshold limit value for glutaraldehyde is exceeded. In case of emergency, or when exposure levels are unknown, use a half face or full face respirator with organic vapor cartridges.

Skin protection: Chemical resistant gloves are recommended. Latex gloves are not impervious to glutaraldehyde and are not as appropriate as nitrile gloves.

Eye Protection: Laboratory safety goggles, safety glasses or face shield are required.

Section 9 - Physical and Chemical Properties

Boiling Point: 100°C
Density: 1.01 g/ml
Vapor pressure (mm Hg): 18 @ 20°C
Evaporation Rate (water = 1): 1
Vapor Density (air = 1): 0.6
Solubility: Infinitely miscible with water
Appearance and Odor: A clear liquid with the characteristic odor of glutaraldehyde. The color starts out clear and yellows with time

Section 10 - Stability and Reactivity

Stability: Freezes at low temperature.

Hazardous Decomposition Products: Nothing unusual.

Hazardous polymerization: Will not occur.

Incompatibilities: Nothing unusual.

Conditions to avoid: Excessive cold/heat and light. High pH catalyses an aldol type polymerization that is exothermic but not expected to be violent.

Section 11 - Toxicological Information

Toxicity: The chronic toxicity of this product is unknown but may include sensitization in sensitive individuals. The toxic effects of glutaraldehyde are believed to be the result of its ability to cross link proteins, which is the same property responsible for its antimicrobial effect. The manufacturer is unaware of any target organ toxicity.

Mutagenicity: The manufacturer is unaware of any evidence that the product is mutagenic or teratogenic. However the effects of these products, glutaraldehyde based disinfectants, are not well investigated and we recommend that pregnant customers use an abundance of caution with these products.

Oral LD_{50} for rats = 134 mg/kg for pure glutaraldehyde
Oral LD_{50} for mouse = 100 mg/kg for pure glutaraldehyde

Ingredient	Known Carcinogenicity?	NTP?	Anticipated?	IARC Category
glutaraldehyde	no	no	no	none

Biocide $_{G30}$ is not a carcinogen or suspected carcinogen.

Section 12 - Ecological Information

Environmental Fate: Biodegradable. Biocide G30 is biodegradable when diluted to a level such that it is not microbicidal.
Environmental Toxicity: May be toxic to fish.

Section 13 - Disposal

Normally not restricted but local governments may restrict the amounts of aldehydes that can be flushed down the drain. In localities where drain disposal is restricted the product may often be neutralized with glycine or sodium bisulfite (about 50 grams per liter) and then flushed down drain. Insure compliance with all government regulation. Do not reuse empty containers. Rinse thoroughly with water and discard in trash.

Section 14 - Transportation information

Not regulated.

Section 15 - Regulatory Information

Chemical Inventory Status

Ingredient	TSCA	EC
glutaraldehyde	Yes	Yes

Federal, State and International Regulations

	SARA 302		SARA 313		RCRA	TSCA	
Ingredient	RQ	TPQ	List	Category	261.33	8(D)	Ca. Prop 65
glutaraldehyde	No	No	No	No	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312: Acute: None, Chronic: None

Section 16 - Other Information

This information is believed to be correct but is not waranteed as such, nor does it purport to be all inclusive.

Revision Date: Dec. 30, 2014