

**Creation date: Feb. 14, 2005**

**Revision date: 12-04-2023**

**Revision number: 1.25**

**Section I - Product Identification**

*Product:* A buffered aqueous solution of glutaraldehyde, buffer salts, surfactant and sodium nitrite.

*Intended Uses:* A disinfecting solution intended to be used for high level disinfection and sterilizing of medical instruments.

*Uses advised against:* Not for use as an antiseptic or for disinfecting environmental surfaces.

**Manufacturer Identification**

Medical Chemical Corp.  
19430 Van Ness Ave.  
Torrance, CA 90501

Customer Service: Phone (310)787-6800  
Email: customerservice@med-chem.com  
FAX (310)787-4464

**Emergency Telephone Number**

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC 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 II - Hazard Identification**

This item is considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Eye damage/eye irritation:** Category 1 (H318). Causes serious eye damage.

**Acute toxicity (Oral):** Category 4 (H302). Harmful if swallowed.

**Acute toxicity (Inhalation):** Category 4 (H332). Harmful if inhaled.

**Acute toxicity (Dermal):** Category 4 (H312). Harmful in contact with skin.

**Sensitization (Skin):** Category 1 (H317). May cause an allergic skin reaction.

**Sensitization (Respiratory):** Category 1 (H334). May cause allergy, asthma symptoms or breathing difficulties if inhaled.

**Hazardous to aquatic life:** Category 2 (H401). Hazardous to the aquatic environment, acute hazard.

**Signal word:** Danger

**Hazard statements:** Acute effects: Glutaraldehyde liquid and vapor can severely irritate the eyes and skin. Breathing glutaraldehyde can irritate the nose, throat, and respiratory tract, causing coughing and wheezing, nausea, headaches, drowsiness, nosebleeds, and dizziness. With chronic exposure workers may become very sensitive to glutaraldehyde and have strong reactions if they are exposed to even small amounts. Workers may get sudden asthma attacks with difficult breathing, wheezing, coughing, and tightness in the chest. Prolonged exposure can cause a skin allergy and chronic eczema. It may cause occupational asthma.

**Precautionary statements**

P233: Keep container tightly closed.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P285: In case of inadequate ventilation wear respiratory protection.

P301+P316: IF SWALLOWED: Get emergency medical help immediately.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352: IF ON SKIN: wash with plenty of water.

P302+P361+P354: IF ON SKIN: Take off Immediately all contaminated clothing. Immediately rinse with water for several minutes.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P333+P317: If skin irritation or rash occurs: Get medical help.

P362+P364: Take off contaminated clothing and wash it before reuse.

P342+P316: If experiencing respiratory symptoms: Get emergency medical help immediately.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

**Safety Ratings**

*Health:* Slightly Hazardous *Flammability:* None *Reactivity:* Stable *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 asthma-like symptoms 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 III - Composition/Information on Components**

Ingredient	CAS#	EC/List No.	%
Glutaraldehyde	111-30-8	203-856-5	2.6% w/w
Sodium Nitrite	7632-00-0	231-555-9	0.12% w/w

Wavicide-01 also contains non-toxic proprietary buffers, surfactants and antifoam.

**Section IV - 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:* Remove contact lenses if possible. Immediately flush thoroughly with running water for at least 15 minutes. Get immediate medical advice.

**Section V - Fire Fighting Measures**

*Fire:* Not normally a fire hazard.

*Explosion:* Not normally an explosion hazard.

*Fire Extinguishing Media:* Any means suitable for surrounding fire.

*Special information:* Pyrolysis will release corrosive vapors.

**Section VI - 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 VII - Handling and Storage**

P403+P233+P102; Keep container tightly closed and store in a well-ventilated place area. Keep out of the reach of children. 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 VIII - Exposure Control/Personal Protection**

Component	ACGIH TLV	OSHA PEL	NIOSH	NIOSH IDLH
Glutaraldehyde	0..05 ppm	0.2 ppm	0.2 ppm	No data
Sodium Nitrite	Not applicable	Not applicable	Not applicable	Not applicable

**Legend**

**ACGIH:** American Conference of Governmental Industrial Hygienists.

**OSHA:** Occupational Safety and Health Administration.

**NIOSH:** National Institute for Occupational Safety and Health.

**IDLH:** Immediately dangerous to life or health.

**Ventilation System:** Use appropriate ventilation. ANSI/AAMI recommends a minimum of ten changes of air per hour. 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 recommended.

**Section IX - Physical and Chemical Properties**

**Appearance and odor:** A clear or yellowish liquid with the pungent odor of glutaraldehyde.

Flash point: Not applicable	<b>Flammable Limits:</b> Not applicable	<b>Auto ignition temperature:</b> Not applicable
<b>Boiling Point:</b> ~ 100 °C (212 °F)@ 1 atm	<b>Boiling point range:</b> No data	<b>Density:</b> 1.01 g/ml @ 22.5 °C
<b>Decomposition temperature:</b> No data	<b>Evaporation Rate (Water = 1):</b> 1	<b>Melting point:</b> ~ 0 °C
<b>Partition coefficient (n-Octanol/Water):</b> No data	pH: 6.3	<b>Solubility:</b> Infinitely miscible with water
<b>Vapor pressure (mm Hg):</b> 18 @ 20 °C	<b>Vapor density (air = 1):</b> 0.6	<b>Viscosity:</b> ~ 0.01 poise
<b>Volatile organic carbon (VOC):</b> Not applicable		

**Section X - Stability and Reactivity**

**Stability:** Stable under normal conditions.

**Hazardous Decomposition Products:** The manufacturer is unaware of any hazardous decomposition products.

**Hazardous polymerization:** Will not occur.

**Incompatibilities:** Polymerizes in the presence of bases.

**Conditions to avoid:** Nothing unusual.

**Section XI - Toxicological Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glutaraldehyde	77 mg/kg (Rat)	>2000 mg/kg (Rat)	20 ppm, 4h (Rat)
Sodium Nitrite	186 mg/kg (Rat)	No data available	No data available

Toxic by ingestion or inhalation. The chronic toxicity of this product is unknown but may include sensitization in sensitive individuals.

**Cancer lists**

Ingredient	Known Carcinogenicity?	NTP?	Anticipated?	IARC Category
Glutaraldehyde	No		No	None
Sodium Nitrite	No		Yes	2A

**Section XII - Ecological Information**

This product is not expected to bioaccumulate. The material is removed from the air by dry and liquid adsorption. The product biodegrades quickly and does not contain endocrine disruptors, persistent organic pollutants or ozone depleters.

**Soil Mobility:** Unknown  
**Environmental Fate:** Biodegradable

**Environmental Toxicity:** Category 2 (H401). Hazardous to the aquatic environment, acute hazard.

**Glutaraldehyde**

Toxicity to freshwater fish: LC50 between 1 mg/l and 10 mg/l for most sensitive organisms.  
 Toxicity to invertebrates (acartia tonsa): EC50 = 6 mg/l, 48 h  
 Toxicity to freshwater algae (green algae): ErC50 = 1.2 mg/l, 72 h

**Sodium nitrite**

Toxicity to freshwater fish (rainbow trout): LC50 = 0.5 -26 mg/l, 96 h  
 Toxicity to invertebrates (water flea): EC50 = 15 mg/l, 48 h  
 Toxicity to freshwater algae (green algae): EC50 = > 100 mg/l, 72 h

**Section XIII - Disposal Considerations**

Normally not restricted but local governments may restrict the amount of glutaraldehyde that can be flushed down the drain. In localities where drain disposal is restricted the product may usually be neutralized with glycine or sodium bisulfite (about 50 grams per liter) and then flushed down the drain. Dispose of contents and container in accordance with all federal, state and local government regulations.

**Section XIV - Transportation Information**

Not regulated by DOT, IATA or IMDG

**Section XV - Regulatory Information**

**Chemical Inventory Status**

Ingredient	TSCA	EC
Glutaraldehyde	Yes	Yes
Sodium Nitrite	Yes	Yes

**Federal and State Regulations**

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

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

**SARA 311/313**

Acute: No  
 Chronic: No  
 Fire: No  
 Pressure: No  
 Reactivity: No

**Section XVI - Other Information**

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

Document Number: S200  
 Revision number: 1.25  
 Revision Date: Nov. 27, 2023