

# SAFETY DATA SHEET

## Glutaraldehyde 50% solution

### 1. IDENTIFICATION

#### Product Identifiers

**Product Name:** Glutaraldehyde 50% solution  
**Other Names:** Glutaraldehyde 50% solution, EM Grade distillation purified.  
**Product No.(s):** C003  
**CAS No.:** 111-30-8

**Recommended use of the chemical and restriction on use:**  
 Laboratory Chemicals.

#### Company Details:

ProSciTech Pty Ltd  
 11 Carlton Street, Kirwan, Qld. 4817 Australia  
**Telephone Number:** (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)  
**Email:** pst@proscitech.com  
**Website:** www.proscitech.com

### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Acute toxicity: Inhalation Category 1  
 Skin corrosion category 1B  
 Acute toxicity: Dermal Category 1  
 Acute toxicity: Inhalation Category 1

#### Label Elements:



Chronic Health Hazards  
 Health Hazards  
 Corrosive  
 Environmental

**Signal Word:** Danger

#### Hazard Statement(s):

H314: Causes severe skin burns and eye damage  
 H317: May cause an allergic skin reaction  
 H332: Harmful if inhaled  
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

#### Precautionary Statement(s):

P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
 P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.  
 P264: Wash ... thoroughly after handling.  
 P271: Use only outdoors or in a well ventilated area.  
 P280: Wear face protection. Specify type of equipment.  
 P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353 IF ON SKIN (OR HAIR): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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 so. Continue rinsing.  
 P310: Immediately call a POISON CENTRE or doctor/physician.  
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P321: Specific treatment (see ... on this label)  
 P363: Wash contaminated clothing before reuse.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local, state and federal regulations.

**Primary route(s) of entry:**

Inhalation, ingestion, skin and/or eye contact.

**Human Health**

**Inhalation:** Symptoms are unknown, if feeling ill or have been exposed seek medical aid.

**Ingestion:** Symptoms are unknown, if feeling ill or have been exposed seek medical aid.

**Eyes:** Symptoms are unknown, if feeling ill or have been exposed seek medical aid.

**Skin:** Symptoms are unknown, if feeling ill or have been exposed seek medical aid.

**Environment:** Hazardous to the environment, toxic to aquatic organisms.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	Cas No.	Content (w/w)	Classification
Glutaraldehyde [Glutaral;1,5-Pentanedial]	111-30-8	50.07%	Acute toxicity: Inhalation Category 1  Skin corrosion category 1B Acute toxicity: Dermal Category 1 Acute toxicity: Inhalation Category 1
DI Distilled Water	-	49.93%	-

### 4. FIRST AID MEASURES

**Ingestion**

Immediately call a doctor if swallowed. Drink copious amounts of water and provide fresh air.

**Inhalation:**

Supply fresh air or oxygen; call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

**Skin Contact:**

Immediately wash with water and soap and rinse thoroughly.

**Eye Contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**Other Information:**

Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the incident. Remove breathing apparatus only after contaminated clothing has been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

### 5. FIREFIGHTING MEASURES

Suitable extinguishing equipment

**SMALL FIRE:**

CO<sub>2</sub>, extinguishing powder or water spray.

**LARGE FIRE:**

Water spray or alcohol resistant foam.

**HAZCHEM:** Undetermined.

**Special protective equipment and precautions for fire fighters:**

Wear appropriate protective equipment for the surrounding fire. Including respiratory equipment.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation of area.

**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system. Dilute the solution with plenty of water. Do not allow to enter sewers/surface or ground water.

**Methods and materials for containment and clean up:**

Absorb the liquid with a liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use a neutralising agent. Dispose of the contaminated material as waste according to Section 13.

## 7. HANDLING AND STORAGE

### Precautions for safe handling:

Ensure good ventilation/exhaust system in the work area. Open and handle the container and contents with care. Prevent formation of aerosols (fumes/gases). Wear appropriate protective equipment while handling – refer to Section 8. Keep respiratory protective device available in case of emergency/accident/fire. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and after working with the material.

### Conditions for safe storage:

Keep container tightly sealed when not in use. Store in a cool place – preferably a refrigerator to keep the temperature between 4°C to -18°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Standards

Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>
Glutaraldehyde	0.1 Peak	0.41 Peak	-	-
[Glutaral;1,5-Pentanedial]	limitation	limitation		

### Engineering controls:

Ensure adequate ventilation/exhaust system to remove fumes/gases from the work area.

### Personal protective equipment:

#### Eye and face protection:

Tightly sealed goggles.

#### Skin protection:

Gloves – impermeable and resistant to the substance.

#### Body Protection:

Protective clothing – lab apron, long clothing, enclosed shoes.

#### Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

<b>Appearance:</b>	Liquid, colourless.
<b>Odour:</b>	Fruit like.
<b>pH:</b>	@25°C: 3.38
<b>Vapour pressure:</b>	17 mmHg at 20°C (23 hPa)
<b>Density:</b>	@20°C: 1.0125 g/cm <sup>3</sup>
<b>Boiling point:</b>	100°C
<b>Melting point:</b>	Not determined.
<b>Solubility:</b>	Fully miscible in water.
<b>Specific gravity or density:</b>	@20/20°C: 1.1245
<b>Flash Point:</b>	71°C
<b>Flammable (explosive) limits:</b>	No limits determined.
<b>Ignition temperature:</b>	Product is not self-igniting.
<b>Formula:</b>	OCHC <sub>3</sub> H <sub>6</sub> HCO

## 10. STABILITY AND REACTIVITY

### Reactivity:

#### Chemical stability:

Stable under normal conditions of use.

#### Possibility of hazardous reactions:

No dangerous reactions known.

#### Conditions to avoid:

No information available.

**Incompatible materials:**

No information available.

**11. TOXICOLOGICAL INFORMATION****Information on toxicological effects:**

Is a corrosive substance, causes burning.

**Eye contact:**

Strong caustic effect.

**Skin contact:**

Caustic effect on skin and mucous membranes. Skin sensitisation.

**Ingestion**

Strong caustic effect on mouth and throat ant to the danger of perforations of oesophagus and stomach.

**Inhalation**

Sensitisation through inhalation.

**Toxicity and irritation**

Oral: LD50: 134 mg/kg (rat)

Dermal: LD50: 2560 mg/kg (rabbit)

**12. ECOLOGICAL INFORMATION****Ecotoxicity:**

Very toxic for fish. Water hazard class 3 (self-assessment): extremely hazardous for water.

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach bodies of water or drainage ditch undiluted or un-neutralised.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms.

**13. DISPOSAL CONSIDERATIONS****General information:**

Dispose of according to local, state and federal regulations.

Must not be disposed of as household garbage. Do not allow the product to reach sewage system.

Dispose of container packaging in accordance with local, state and federal regulations, or wash thoroughly for reuse using water and cleansing/neutralising agents.

**14. TRANSPORT INFORMATION****ADG label required:****HAZCHEM:** Not determined.**UN number:**

UN1760

**Proper shipping name:**

Corrosive liquid, N.O.S. (Glutaraldehyde)

**Transport hazard class:**

8

**Packing group:**

PG II

**Environmental hazard:**

Hazardous to the Environment

**Special precautions for users:**

Not available.

**Additional information:**

Not available.

**15. REGULATORY INFORMATION****Poisons Schedule Number:** No data available to allocate a Poison Schedule Number.**16. OTHER INFORMATION****SDS preparation date:** 1 March 2013

**Comments:**

{Other relevant information to the hazardous material }

List of Publications referenced when creating this SDS;

- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

*This Safety Data Sheet (SDS) has been prepared in compliance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice 2011. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this SDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Safety Data Sheets as new information becomes available. Copies may be made for non-profit use. ... End of SDS ...*