



## Safety Data Sheet

Classified according to WHMIS 2015

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Glutaraldehyde, 24% w/w, aqueous

**Product Number:** RSOG0300

**Other Identifying Product Numbers:** RSOG0300-500A

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Ricca Chemical Company

**Address:** 448 West Fork Drive

Arlington, TX 76012 USA

**Telephone:** 888-467-4222

#### 1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA)

800-424-9300

CHEMTREC (International)

1+ 703-527-3887

# Safety Data Sheet

## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

| Hazard Class                                   | Category   | Hazard Statements | Precautionary Statements:   |
|--|------------|-------------------|---|
| Acute Toxicity - Oral                          | Category 4 | H302              | P264, P270, P301+P312, P330, P501   |
| Acute Toxicity - Inhalation                    | Category 3 | H331              | P261, P271, P304+P340, P311, P321, P403+P233, P405, P501  |
| Skin Corrosion / Irritation                    | Category 1 | H314              | P260, P264, P280, P301+P330+P331, P303+P361+P353, P363, P304+P340, P310, P321, P305+P351+P338, P405, P501 |
| Eye Damage / Irritation                        | Category 1 | H318              | P280, P305+P351+P338, P310  |
| Respiratory Sensitizer                         | Category 1 | H334              | P261, P285, P304+P341, P342+P311, P501  |
| Skin Sensitizer                                | Category 1 | H317              | P261, P272, P280, P302+P352, P332+P313, P321, P363, P501  |
| Hazardous to the Aquatic Environment (Acute)   | Category 2 | H401              | P273, P501  |
| Hazardous to the Aquatic Environment (Chronic) | Category 3 | H412              | P273, P501  |

### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

| Hazard Number | Hazard Statement   |
|---------------|--|
| H302          | Harmful if swallowed.  |
| H314          | Causes severe skin burns and eye damage.                                   |
| H317          | May cause an allergic skin reaction.                                       |
| H318          | Causes serious eye damage.   |
| H331          | Toxic if inhaled.  |
| H334          | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H401          | Toxic to aquatic life.   |
| H412          | Harmful to aquatic life with long lasting effects.                         |

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**Precautionary Statements:**

| Precautionary Number | Precautionary Statement  |
|----------------------|--|
| P260                 | Do not breathe fumes, mist, vapors, or spray.  |
| P261                 | Avoid breathing fumes, mist, vapors, or spray.   |
| P264                 | Wash arms, hands and face thoroughly after handling.   |
| P270                 | Do not eat, drink or smoke when using this product.  |
| P271                 | Use only outdoors or in a well-ventilated area.  |
| P272                 | Contaminated work clothing must not be allowed out of the workplace.   |
| P273                 | Avoid release to the environment.  |
| P280                 | Wear protective gloves and eye protection.   |
| P285                 | In case of inadequate ventilation wear respiratory protection.   |
| P301+P312            | IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.  |
| P301+P330+P331       | IF SWALLOWED: rinse mouth. Do NOT induce vomiting.   |
| P302+P352            | IF ON SKIN: Wash with plenty of soap and water.  |
| P303+P361+P353       | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.                                     |
| P304+P340            | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P304+P341            | IF INHALED: If breathing is difficult, 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. |
| P310                 | Immediately call a POISON CENTER or physician.   |
| P311                 | Call a POISON CENTER or physician.   |
| P321                 | Specific treatment (Wash areas of contact with water).   |
| P330                 | Rinse mouth.   |
| P332+P313            | If skin irritation occurs: Get medical attention.  |
| P342+P311            | If experiencing respiratory symptoms: Call a POISON CENTER or physician.   |
| P363                 | Wash contaminated clothing before reuse.   |
| P403+P233            | Store in a well-ventilated place. Keep container tightly closed.   |
| P405                 | Store locked up.   |
| P501                 | Dispose of contents in accordance with local, state, federal and international regulations.                                      |

**2.4. Hazards not Otherwise Classified or Covered by GHS**

Data not available.

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## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

| Chemical Name  | Formula                                | Molecular Weight | CAS Number | Weight% |
|----------------|--|------------------|------------|---------|
| Water          | H <sub>2</sub> O                       | 18.01 g/mol      | 7732-18-5  | 76.00   |
| Glutaraldehyde | OCH(CH <sub>2</sub> ) <sub>3</sub> CHO | 100.11 g/mol     | 111-30-8   | 24.00   |

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Inhalation:** IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

**Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes serious skin burns and eye damage. Harmful if swallowed. May cause respiratory irritation.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Do not induce vomiting. Give large quantity of water. Call a physician immediately.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Water spray, dry chemical, carbon dioxide.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Carbon oxides may form when heated.

### 5.3. Special Protective Equipment for Firefighters

Wear special protective clothing and positive pressure self-contained breathing apparatus.

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## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

### 6.2. Cleanup and Containment Methods and Materials

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. Dike far ahead of spill; use dry sand to contain the flow of material. Ventilate the area.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store locked up.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1 Control Parameters

| Chemical Name             | Limit Type  | Country | Exposure Limit                              | Information Source                                |
|---------------------------|-------------|---------|---|---|
| Glutaraldehyde (111-30-8) | TLV-Ceiling | USA     | 0.05 ppm Ceiling (activated or unactivated) | ACGIH - Threshold Limit Values - Ceilings (TLV-C) |

### 8.2. Exposure Controls

**Engineering Controls:** Use only outdoors or in a well-ventilated area. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

**Respiratory Protection:** In case of inadequate ventilation wear respiratory protection. If the exposure limit is exceeded, a full facepiece respirator equipped with organic vapor cartridge should be worn.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection. If the exposure limit is exceeded, a full facepiece respirator equipped with organic vapor cartridge should be worn. Chemical resistant gloves. Safety glasses or goggles.



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### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

**Appearance:** Colorless

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** 3.3-5.5

**Melting/Freezing Point:** -6°C

**Initial Boiling Point/Range:** 101°C - 101°C

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** 1.06

**Solubility:** Miscible

**Partition Coefficient:** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

### SECTION 10: Stability and Reactivity

#### 10.1. Reactivity and Chemical Stability

Air sensitive. Light sensitive. Moisture sensitive.

#### 10.2. Possibility of Hazardous Reactions

Data not available.

#### 10.3. Conditions to Avoid and Incompatible Materials

Avoid excessive heat and light.

#### 10.4. Hazardous Decomposition Products

May emit irritating fumes when heated to decomposition.

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## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Dermal Exposure:

Not applicable.

#### Acute Toxicity - Inhalation Exposure:

Toxic if inhaled. Avoid breathing fumes, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Other Information:

LD50 Peroral, Rat, female (Glutaraldehyde): 154 (116-206) mg/kg; LD50 Peroral, Rat, male (Glutaraldehyde): 246 (179-339) mg/kg; LD50 Percutaneous, Rabbit 24hr occluded (Glutaraldehyde): 2.54 (1.46-4.41) ml/kg

#### Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

#### Respiratory Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing fumes, mist, vapors, or spray. In case of inadequate ventilation wear respiratory protection. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Dispose of contents in accordance with local, state, federal and international regulations.

#### Skin Sensitization:

May cause an allergic skin reaction. Avoid breathing fumes, mist, vapors, or spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

#### Germ Cell Mutagenicity:

Not applicable.



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**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

### SECTION 12: Ecological Information

**12.1. Ecotoxicity**

Toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations. Harmful to aquatic life with long lasting effects. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

**12.2. Persistence and Degradability**

Data not available.

**12.3. Bioaccumulative Potential**

Data not available.

**12.4. Mobility in Soil**

Data not available.

**12.5. Other Adverse Ecological Effects**

Data not available.

### SECTION 13: Disposal Considerations

**13.1. Waste Treatment Methods**

Dispose of in accordance with local, state and federal regulations. Do not allow this to enter waterways.



# Safety Data Sheet

## SECTION 14: Transportation Information

### 14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

**Sizes:** 500 mL

**UN Number:** UN3265

**Proper Shipping Name:** Corrosive liquid, acidic, organic, n.o.s. (Glutaraldehyde)

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**



### 14.2. Transportation by Air - International Air Transport Association (IATA)

**Sizes:** 500 mL

**UN Number:** UN3265

**Proper Shipping Name:** Corrosive liquid, acidic, organic, n.o.s. (Glutaraldehyde)

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**



### 14.3 Transportation of Dangerous Goods (TDG, Canada)

**Sizes:** 500 mL

**UN Number:** UN3265

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (glutaraldehyde)

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**



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### SECTION 15: Regulatory Information

#### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

#### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

#### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Not listed.

#### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

#### 15.5. Massachusetts Right-to-Know Substance List

Glutaraldehyde (CAS # 111-30-8): Present

#### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Glutaraldehyde (CAS # 111-30-8): Present

Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6]

Water (CAS # 7732-18-5): Present

#### 15.7. New Jersey Worker and Community Right-to-Know Components

Glutaraldehyde (CAS # 111-30-8): sn 0960

#### 15.8. California Proposition 65

Not listed.

#### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Glutaraldehyde (CAS # 111-30-8): Present (DSL)

Water (CAS # 7732-18-5): Present (DSL)

#### 15.10. United States of America Toxic Substances Control Act (TSCA) List

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Glutaraldehyde (CAS # 111-30-8): Present (ACTIVE)

Water (CAS # 7732-18-5): Present (ACTIVE)

#### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Glutaraldehyde (CAS # 111-30-8): 203-856-5

Water (CAS # 7732-18-5): 231-791-2

# Safety Data Sheet

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

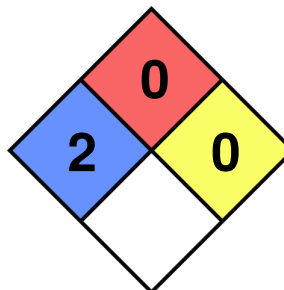
**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

**Biohazardous Infectious Materials Hazard Class:** Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

**Health:** 2  
**Flammability:** 0  
**Reactivity:** 0  
**Special Hazard:**



### 16.4. Document Revision

**Last Revision Date:** 2023-10-11

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.