

MATERIAL SAFETY DATA SHEET

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MSDS No. GG 200
Effective Date March 5, 1999

SECTION V HEALTH HAZARD DATA

GG200

Threshold Limited Value None established for this mixture. ACGIH 1992-93
As Glutaraldehyde CEIL: 0.05 ppmV.

Effects of Overexposure **EYES:** Contact with liquid may cause severe irritation or burns. **SKIN:** Contact with skin causes brown staining and is irritating. Can cause allergic skin reaction. **INHALATION:** Vapors may be irritating to respiratory tract. **INGESTION:** Moderately toxic. May cause irritation and/or burns to mouth, throat, esophagus and stomach. May cause discomfort or pain in the chest and abdomen, nausea, vomiting, diarrhea, dizziness, faintness, drowsiness, thirst, weakness, circulatory shock, collapse and coma. Aspiration hazard.

Emergency and First Aid Procedures **EYES:** Flush thoroughly with water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get immediate medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. If allergic irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **INGESTION:** If swallowed, **DO NOT** give anything to drink. **DO NOT** induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

SECTION VI REACTIVITY DATA

| | | | |
|------------------|-----------------|---|---|
| Stability | Unstable | | Conditions to Avoid Excessive temperatures and heat. Avoid contamination by acids and alkalis. |
| | Stable | X | |

Incompatibility (Materials to Avoid) Strong oxidizers, reducing agents, acids and alkalis.

Hazardous Decomposition Products Thermal decomposition or burning will produce carbon dioxide and/or carbon monoxide.

| | | |
|---------------------------------|-----------------------|--|
| Hazardous Polymerization | | Conditions to Avoid Temperatures above 100°C (212°F). Although polymerization may occur, it is not hazardous. |
| May Occur | Will Not Occur | |
| | X | |

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Absorb spill with an inert dry material and place in a suitable container for disposal. Wash spill area with dilute ammonia solution to remove any residual odor.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved incinerator equipped with an afterburner or scrubber.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) For laboratory use work in fume hood or wear a NIOSH/MSHA- approved cartridge respirator for organic vapors.

| | | | | |
|--------------------|-----------------------------|-------------|----------------|-----|
| Ventilation | Local Exhaust | Recommended | Special | No. |
| | Mechanical (General) | Recommended | Other | No. |

Protective Gloves Rubber. **Eye Protection** Chemical safety glasses.

Other Protective Equipment Smock, apron, eye wash station, goggles and shield ventilation hood, proper gloves.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool, dry, well-ventilated place, away from flammable or oxidizing materials. Wash thoroughly after handling.
Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Remove and wash contaminated clothing before reuse.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

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|-----------------------|--------------------|---------------------------------|---------------------------------------|
| Revision No. 7 | Date 3/5/99 | Approved Michael Raszeja | Chemical Safety Coordinator MR |
|-----------------------|--------------------|---------------------------------|---------------------------------------|

The information contained herein is furnished without warranty of any kind. Employees should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

| | | |
|--------------------------|-------------------------------|---|
| Product | GLUTARALDEHYDE (25% in water) |  CHEMTREC 800-424-9300 Day 716-226-6177 NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4 HMIS * Health 1 Fire 0 Reactivity 1 |
| Chemical Synonyms | Glutaraldehyde (25% in water) | |
| Formula | Mixture. | |
| Unit Size | up to 4 Lt. | |
| C.A.S. No. | Mixture. | |

SECTION II INGREDIENTS OF MIXTURES

| Principal Component(s) | % | TLV Units |
|------------------------------------|-----|------------------|
| Glutaraldehyde: (CAS No. 111-30-8) | 25% | None established |
| Water: (CAS No. 7732-18-5) | 75% | None established |

WARNING! CORROSIVE! HARMFUL IF INHALED, SWALLOWED OR

ABSORBED THROUGH SKIN.

SECTION III PHYSICAL DATA

| | | | |
|-------------------------------|---|--|------------------|
| Melting Point (°F) | Approx. 0°C (32°F) (water) | Specific Gravity (H₂O = 1) | Approx. 1.0 |
| Boiling Point (°F) | Approx. 100°C (212°F) (water) | Percent Volatile by Volume (%) | 100% |
| Vapor Pressure (mm Hg) | 0.2 mm @ 68°F | Evaporation Rate (Butyl acetate =1) | Greater than 1.0 |
| Vapor Density (Air=1) | 1.1 (Glutaraldehyde) | | |
| Solubility in Water | Complete | | |
| Appearance & Odor | Clear, colorless to pale yellow liquid; sweet, floral odor. | | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | | | | | |
|----------------------------------|----------------|--|-----|--------------|--------------|
| Flash Point (Method Used) | Non-flammable. | Flammable Limits in Air % by Volume | N/A | Lower | Upper |
|----------------------------------|----------------|--|-----|--------------|--------------|

Extinguisher Media Water spray; carbon dioxide (CO₂); dry chemical.

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Wear goggles if eye protection is not provided.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions, water may evaporate from this solution, which may cause hazardous products to be produced as dust or fume.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 154)

D.O.T. Corrosive liquids, n.o.s., (Glutaraldehyde), 8, UN 1760, PG III

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20