

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** Glutaraldehyde 25 % Aqueous

**Other means of identification**

**Product No.:** 2127, M752, 11931

**Recommended use and restriction on use**

**Recommended use:** Not available.

**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company Name:** Avantor Performance Materials, Inc.  
**Address:** 3477 Corporate Parkway, Suite 200  
Center Valley, PA 18034

**Telephone:** Customer Service: 855-282-6867

**Fax:**  
**Contact Person:** Environmental Health & Safety  
**e-mail:** info@avantormaterials.com

**Emergency telephone number:**

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

## 2. Hazard(s) identification

**Hazard classification**

**Health hazards**

Acute toxicity (Oral)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitizer	Category 1B
Specific target organ toxicity - single exposure	Category 3

**Environmental hazards**

Acute hazards to the aquatic environment	Category 1
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**Label elements**

**Hazard symbol:**



**Signal word:** Danger

**Hazard statement:** Harmful if swallowed.  
Causes serious eye damage.  
Causes skin irritation.  
May cause respiratory irritation.  
May cause an allergic skin reaction.  
Very toxic to aquatic life.

**Precautionary statement**

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Avoid release to the environment.

**Response:** IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see this label). Collect spillage.

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

**Other hazards which do not result in GHS classification:** None.

**3. Composition/information on ingredients**

**Mixtures**

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
GLUTARALDEHYDE		111-30-8	23 - 31%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

**General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

**Ingestion:** Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact:** Wash the skin immediately with soap and water. If skin irritation or an allergic skin reaction develops, get medical attention. Wash contaminated clothing before reuse.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Harmful if swallowed. Causes serious eye damage. Irritating to eyes, respiratory system and skin.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically. Symptoms may be delayed.

**5. Fire-fighting measures**

**General fire hazards:** In case of fire and/or explosion do not breathe fumes. Move container from fire area if it can be done without risk. Use water spray to keep fire-exposed containers cool.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** None known.

**Specific hazards arising from the chemical:** May burn, but does not ignite readily.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No unusual fire or explosion hazards noted.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Keep unauthorized personnel away. Keep upwind. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. See Section 8 of the MSDS for Personal Protective Equipment.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal. Clean surface thoroughly to remove residual contamination.

**Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling:** Use personal protective equipment as required. Do not taste or swallow. Do not eat, drink or smoke when using the product. Do not get in eyes and avoid contact with skin and clothing. Avoid breathing mist. Wash hands thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.

**Conditions for safe storage, including any incompatibilities:** Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Store in a cool and well-ventilated place.

## 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source

**Appropriate engineering controls** No data available.

### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

**Eye/face protection:** Wear safety glasses with side shields (or goggles) and a face shield.

#### Skin protection

**Hand protection:** Wear protective gloves.

**Other:** Wear suitable protective clothing.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:** Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state:** Liquid

**Form:** Liquid

**Color:** Colorless

**Odor:** Characteristic

**Odor threshold:** No data available.

<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	-10 °C
<b>Initial boiling point and boiling range:</b>	101 °C
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	0.2 kPa
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	1.09 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Soluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid:</b>	Contact with incompatible materials. Heat.
<b>Incompatible materials:</b>	Contact with alkalis. Oxidizing agents.
<b>Hazardous decomposition products:</b>	Fire or excessive heat may produce hazardous decomposition products.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion:</b>	Harmful if swallowed. May cause irritation of the gastrointestinal tract.
<b>Inhalation:</b>	May cause irritation to the respiratory system.
<b>Skin contact:</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye damage.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	No data available.
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**Specified substance(s):**  
GLUTARALDEHYDE      LD 50 (Rat): 96.1 mg/kg  
LD 50 (Mouse): 100 mg/kg

**Dermal**  
**Product:**                      No data available.

**Specified substance(s):**  
GLUTARALDEHYDE      LD 50 (Rabbit): 2,560 mg/kg

**Inhalation**  
**Product:**                      No data available.

**Specified substance(s):**  
GLUTARALDEHYDE      LC 50 (Rat, 4 h): 24 mg/l

**Repeated dose toxicity**  
**Product:**                      No data available.

**Skin corrosion/irritation**  
**Product:**                      Causes skin irritation.

**Serious eye damage/eye irritation**  
**Product:**                      Causes serious eye damage.

**Respiratory or skin sensitization**  
**Product:**                      May cause an allergic skin reaction.

**Carcinogenicity**  
**Product:**                      This substance has no evidence of carcinogenic properties.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**  
No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**  
No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**  
No carcinogenic components identified

**Germ cell mutagenicity**

**In vitro**  
**Product:**                      No mutagenic components identified

**In vivo**  
**Product:**                      No mutagenic components identified

**Reproductive toxicity**  
**Product:**                      No components toxic to reproduction

**Specific target organ toxicity - single exposure**  
**Product:**                      Respiratory tract irritation.

**Specific target organ toxicity - repeated exposure**  
**Product:**                      None known.

**Aspiration hazard**  
**Product:**                      May be harmful if swallowed and enters airways.

**Other effects:**                      None known.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

GLUTARALDEHYDE  
 LC 50 (Bluegill Sunfish, 96 h): 13 mg/l  
 LC 50 (Bluegill Sunfish, 24 h): 19 mg/l  
 LC 50 (Bluegill Sunfish, 48 h): 13 mg/l  
 LC 50 (Bluegill Sunfish, 72 h): 13 mg/l  
 LC 50 (Rainbow Trout, 24 h): 17 mg/l

##### Aquatic invertebrates

**Product:** LC 50 (Water Flea, 48 h): 16.3 mg/l  
 LC 50 (Grass Shrimp, 96 h): 41 mg/l  
 LC 50 (Green or European shore crab (*Carcinus maenas*), 96 h): 465 mg/l

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Aquatic invertebrates

**Product:** No data available.

##### Toxicity to Aquatic Plants

**Product:** No data available.

#### Persistence and degradability

##### Biodegradation

**Product:** There are no data on the degradability of this product.

##### BOD/COD ratio

**Product:** No data available.

#### Bioaccumulative potential

##### Bioconcentration factor (BCF)

**Product:** No data available on bioaccumulation.

##### Partition coefficient n-octanol / water (log Kow)

**Product:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** Very toxic to aquatic organisms.

## 13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

UN number: UN 3265  
 UN proper shipping name: Corrosive liquid, acidic, organic, n.o.s.(GLUTARALDEHYDE)  
 Transport hazard class(es)  
   Class(es): 8  
   Label(s): 8  
 Packing group: III  
 Marine Pollutant: No

### IMDG

UN number: UN 3265  
 UN proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(GLUTARALDEHYDE)  
 Transport hazard class(es)  
   Class(es): 8  
   Label(s): 8  
   EmS No.: F-A, S-B  
 Packing group: III  
 Marine Pollutant: No

### IATA

UN number: UN 3265  
 Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(GLUTARALDEHYDE)  
 Transport hazard class(es):  
   Class(es): 8  
   Label(s): 8  
 Marine Pollutant: No  
 Packing group: III

## 15. Regulatory information

### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

#### CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

#### Superfund amendments and reauthorization act of 1986 (SARA)

##### Hazard categories

Acute (Immediate)  Chronic (Delayed)  Fire  Reactive  Pressure Generating

#### SARA 302 Extremely hazardous substance

None present or none present in regulated quantities.

#### SARA 304 Emergency release notification

None present or none present in regulated quantities.

**SARA 311/312 Hazardous chemical**

Chemical identity	Threshold Planning Quantity
GLUTARALDEHYDE	500 lbs

**SARA 313 (TRI reporting)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US state regulations**

**US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

**US. New Jersey Worker and Community Right-to-Know Act**

GLUTARALDEHYDE	Listed
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**US. Massachusetts RTK - Substance List**

GLUTARALDEHYDE	Listed
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**US. Pennsylvania RTK - Hazardous Substances**

GLUTARALDEHYDE	Listed
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**US. Rhode Island RTK**

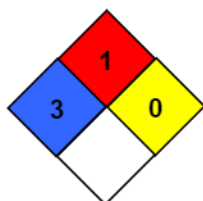
GLUTARALDEHYDE	Listed
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**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EU EINECS List:	On or in compliance with the inventory
EU ELINCS List:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

**16. Other information, including date of preparation or last revision**

**NFPA Hazard ID**



	Flammability
	Health
	Reactivity
	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Issue date:** 06-18-2014

**Revision date:** No data available.

**Version #:** 1.0

**Further information:** No data available.

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