



## SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 03/14/2017

Revision Date 03/14/2017

### 1 Identification of the Substance/Mixture and Company

**Product Name:** 3% Glutaraldehyde

**SDS Code:** SSFXGLU3

**Product Description:** Tissue Fixative

**Manufacturer/Supplier:**

American MasterTech  
1330 Thurman Street  
Lodi, CA 95240  
USA  
(800) 860-4073

**European Authorized Representative:**

Emergo Europe  
Prinsessegracht 20  
2514 AP The Hague,  
The Netherlands

**Emergency Telephone Number:** Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

### 2 Hazards Identification

**Classification of the substance or mixture**



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

**Label elements**

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**



GHS05



GHS08

**Signal word** Danger

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**Product Name: 3% Glutaraldehyde**


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**Hazard-determining components of labeling:**

glutaral

**Hazard statements**

Causes skin irritation.

Causes serious eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Toxic to aquatic life.

**Precautionary statements**

[In case of inadequate ventilation] wear respiratory protection.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves / eye protection / face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

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/doctor.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Wash contaminated clothing before reuse.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If skin irritation or rash occurs: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:****NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

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## 3 Composition

**Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with nonhazardous additions.**Dangerous components:**

111-30-8   glutaral	3%
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### 4 First Aid Measures

**Description of first aid measures**
**After inhalation:**

Supply fresh air and to be sure call for a doctor.

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

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** If symptoms persist consult doctor.
**Information for doctor:**
**Most important symptoms and effects, both acute and delayed:** No further relevant information available.**Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

### 5 Firefighting Measures

**Extinguishing media**
**Suitable extinguishing agents:** Use fire fighting measures that suit the environment.**Special hazards arising from the substance or mixture:** No further relevant information available.
**Advice for firefighters**
**Protective equipment:** No special measures required.

### 6 Accidental Release Measures

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

Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**Protective Action Criteria for Chemicals**
**PAC-1:**

111-30-8	glutaral	0.2 ppm
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**PAC-2:**

111-30-8	glutaral	1 ppm
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**PAC-3:**

111-30-8	glutaral	5 ppm
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### 7 Handling and Storage

**Handling:****Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.**Information about protection against explosions and fires:** No special measures required.**Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** Keep receptacle tightly sealed.**Specific end use(s):** No further relevant information available.

### 8 Exposure Controls/Personal Protection

**Additional information about design of technical systems:** No further data; see item 7.**Control parameters****Components with limit values that require monitoring at the workplace:****111-30-8 glutaral**

REL	Ceiling limit value: 0.8 mg/m <sup>3</sup> , 0.2 ppm See Pocket Guide App. C
TLV	Ceiling limit value: 0.2 mg/m <sup>3</sup> , 0.05 ppm DSEN;RSEN ;activated or inactivated

**Additional information:** The lists that were valid during the creation were used as basis.**Exposure controls:****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

**Breathing equipment:**

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.

**Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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**Product Name: 3% Glutaraldehyde**
**Eye protection:** Tightly sealed goggles

### 9 Physical and Chemical Properties

**Information on basic physical and chemical properties**
**General Information**
**Appearance**

<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Slightly sweetish
<b>Odor threshold:</b>	Not determined.

<b>pH-value:</b>	Not determined.
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**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)

<b>Flash point:</b>	Not applicable.
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<b>Flammability (solid, gaseous):</b>	Not applicable.
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**Ignition temperature:**

<b>Decomposition temperature:</b>	Not determined.
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<b>Auto igniting:</b>	Product is not selfigniting.
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<b>Danger of explosion:</b>	Product does not present an explosion hazard.
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**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

<b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17 mm Hg)
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<b>Density at 20 °C (68 °F):</b>	0 g/cm <sup>3</sup> (0 lbs/gal)
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<b>Relative density:</b>	Not determined.
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<b>Vapour density:</b>	Not determined.
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<b>Evaporation rate:</b>	Not determined.
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**Solubility in / Miscibility with**

<b>Water:</b>	Fully miscible.
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<b>Partition coefficient (n-octanol/water):</b>	Not determined.
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<b>Dynamic at 20 °C (68 °F):</b>	0 mPas
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<b>Kinematic:</b>	Not determined.
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<b>Other information:</b>	No further relevant information available.
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### 10 Stability and Reactivity

**Reactivity:** No further relevant information available.

**Chemical stability:**
**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available.

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**Product Name: 3% Glutaraldehyde**
**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicology Information

### Information on toxicological effects

#### Acute toxicity:

**LD/LC50 values that are relevant for classification:**

#### 111-30-8 glutaral

Oral LD50 134 mg/kg (rat)

Dermal LD50 2560 mg/kg (rabbit)

#### Primary irritant effect:

**On the skin:** Irritant to skin and mucous membranes.

**On the eye:** Strong irritant with the danger of severe eye injury.

#### Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

#### Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

#### Carcinogenic categories

#### IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

#### NTP (National Toxicology Program)

None of the ingredients are listed.

#### OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

## 12 Ecological Information

#### Toxicity:

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability:** No further relevant information available.

#### Behavior in environmental systems:

**Bioaccumulative potential:** No further relevant information available.

**Mobility in soil:** No further relevant information available.

#### Additional ecological information:

#### General notes:

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 unneutralized.

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

#### Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

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**Other adverse effects:** No further relevant information available.
 

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### 13 Disposal Considerations

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport Information

<b>UN-Number</b> DOT, ADR, ADN, IMDG, IATA	Not applicable
<b>UN proper shipping name</b> DOT, ADR, ADN, IMDG, IATA	Not applicable
<b>Transport hazard class(es)</b> DOT, ADR, ADN, IMDG, IATA Class	Not applicable
<b>Packing group</b> DOT, ADR, IMDG, IATA	Not applicable
<b>Environmental hazards</b> Marine pollutant:	No
<b>Special precautions for user:</b> Stowage Category	Not applicable. A
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>	Not applicable.
<b>UN "Model Regulation":</b>	Not applicable

### 15 Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**  
**SARA**

**Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

**Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**Proposition 65****Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

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**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Carcinogenic categories**
**EPA (Environmental Protection Agency)**

None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH)**

111-30-8 | glutaral

A4

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**


GHS05    GHS08

**Signal word** Danger

**Hazard-determining components of labeling:**

glutaral

**Hazard statements**

Causes skin irritation.

Causes serious eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Toxic to aquatic life.

**Precautionary statements**

[In case of inadequate ventilation] wear respiratory protection.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves / eye protection / face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

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/doctor.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Wash contaminated clothing before reuse.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If skin irritation or rash occurs: Get medical advice/attention.

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**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.
 

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### 16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

**Department issuing SDS:** Regulatory Department

**Contact:** Phone (800) 860-4073

**Date of preparation / last revision** 03/14/2017 / -

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

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