

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/28/2015

Reviewed on 09/28/2015

## 1 Identification

- **Product identifier**
- **Trade name:** Glutaraldehyde 70% EM Grade
- **Article number:** 16350, 16360, 16365
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.  
Acute Tox. 3 H311 Toxic in contact with skin.  
Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
STOT SE 1 H370 Causes damage to organs.



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.  
Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.  
Flam. Liq. 4 H227 Combustible liquid.

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

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**Trade name: Glutaraldehyde 70% EM Grade**

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· **Hazard pictograms**



GHS05    GHS06    GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Glutaraldehyde*

· **Hazard statements**

*Combustible liquid.*

*Toxic if swallowed, in contact with skin or if inhaled.*

*Causes severe skin burns and eye damage.*

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

*May cause an allergic skin reaction.*

*Causes damage to organs.*

· **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.*

*Wear protective gloves.*

*Wear eye protection / face protection.*

*Avoid release to the environment.*

*Wash 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.*

*If swallowed: Immediately call a poison center/doctor.*

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

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*Specific treatment (see on this label).*

*IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*

*Wash contaminated clothing before reuse.*

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

*If swallowed: Rinse mouth. Do NOT induce vomiting.*

*Collect spillage.*

*Store locked up.*

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

*Store in a well-ventilated place. Keep cool.*

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



*Health = 3*

*Fire = 0*

*Reactivity = 1*

· **HMIS-ratings (scale 0 - 4)**



*Health = 3*

*Fire = 0*

*Reactivity = 1*

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

### 3 Composition/information on ingredients

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

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Remove breathing apparatus only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for 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:**  
Do not induce vomiting; immediately call for medical help.  
Drink copious amounts of water and provide fresh air. Immediately call a 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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 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.

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**Trade name: Glutaraldehyde 70% EM Grade**

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- *Dispose contaminated material as waste according to item 13.*
- *Ensure adequate ventilation.*
- **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.*

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
- *Ensure good ventilation/exhaustion at the workplace.*
- *Open and handle receptacle with care.*
- *Prevent formation of aerosols.*
- **Information about protection against explosions and fires:** *Keep respiratory protective device available.*
- **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:**
- *The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **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.*
- *Store protective clothing separately.*
- *Avoid contact with the eyes.*
- *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.*

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*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.*

· **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>	Clear
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	101 °C (214 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not flammable.

· **Ignition temperature:**

**Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

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

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 1.143 g/cm<sup>3</sup> (9.538 lbs/gal)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

**Water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

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- |  |
|--|
| <ul style="list-style-type: none"> <li>· <b>Viscosity:</b></li> <li style="padding-left: 20px;"><b>Dynamic:</b> Not determined.</li> <li style="padding-left: 20px;"><b>Kinematic:</b> Not determined.</li> </ul>              |
| <ul style="list-style-type: none"> <li>· <b>Solvent content:</b></li> <li style="padding-left: 20px;"><b>Organic solvents:</b> 0.0 %</li> <li>· <b>Other information</b> No further relevant information available.</li> </ul> |

## 10 Stability and reactivity

- **Reactivity**
- **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.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**  
Strong caustic effect.  
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:  
Toxic  
Harmful  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**

<ul style="list-style-type: none"> <li>· <b>IARC (International Agency for Research on Cancer)</b></li> </ul>
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None of the ingredients is listed.
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<ul style="list-style-type: none"> <li>· <b>NTP (National Toxicology Program)</b></li> </ul>
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None of the ingredients is listed.
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<ul style="list-style-type: none"> <li>· <b>OSHA-Ca (Occupational Safety Health Administration)</b></li> </ul>
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None of the ingredients is listed.
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## 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.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- **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>  |  |
| <b>· DOT, ADR, IMDG, IATA</b>   | UN2922   |
| <b>· UN proper shipping name</b>  |  |
| <b>· DOT</b>  | Corrosive liquids, toxic, n.o.s. (Glutaraldehyde)                                    |
| <b>· ADR</b>  | 2922 Corrosive liquids, toxic, n.o.s. (Glutaraldehyde),<br>ENVIRONMENTALLY HAZARDOUS |
| <b>· IMDG, IATA</b>   | CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)                                     |
| <b>· Transport hazard class(es)</b>   |  |
| <b>· DOT</b>  |  |
|  |  |
| <b>· Class</b>  | 8 Corrosive substances   |

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· **Label** 8(6.1)

· **ADR, IMDG**



· **Class** 8 Corrosive substances  
 · **Label** 8(6.1)

· **IATA**



· **Class** 8 Corrosive substances  
 · **Label** 8 (6.1)

· **Packing group**  
 · **DOT, ADR, IMDG, IATA** II

· **Environmental hazards:** Product contains environmentally hazardous substances:  
 Glutaraldehyde  
 · **Marine pollutant:** No

· **Special precautions for user** Warning: Corrosive substances  
 · **Danger code (Kemler):** 88  
 · **EMS Number:** F-A,S-B  
 · **Segregation groups** Acids

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**  
 · **Quantity limitations** On passenger aircraft/rail: 1 L  
 On cargo aircraft only: 30 L

· **ADR**  
 · **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

· **IMDG**  
 · **Limited quantities (LQ)** 1L  
 · **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN2922, Corrosive liquids, toxic, n.o.s. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS, 8(6.1), II

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## 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 is listed.

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

None of the ingredients is listed.

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

None of the ingredients is 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 is listed.

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

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS05

GHS06

GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Glutaraldehyde*

· **Hazard statements**

*Combustible liquid.*

*Toxic if swallowed, in contact with skin or if inhaled.*

*Causes severe skin burns and eye damage.*

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

*May cause an allergic skin reaction.*

*Causes damage to organs.*

· **Precautionary statements**

*In case of inadequate ventilation wear respiratory protection.*

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

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## acc. to OSHA HCS

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Reviewed on 09/28/2015

**Trade name: Glutaraldehyde 70% EM Grade**

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Wear protective gloves / eye protection / face protection.  
 Wear protective gloves.  
 Wear eye protection / face protection.  
 Avoid release to the environment.  
 Wash 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.  
 If swallowed: Immediately call a poison center/doctor.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 Specific treatment (see on this label).  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Wash contaminated clothing before reuse.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 Collect spillage.  
 Store locked up.  
 Store in a well-ventilated place. Keep container tightly closed.  
 Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 09/28/2015 / -

- **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)

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

## 1 Identification of the substance/mixture and of the company/undertaking

· **Product identifier**

· **Trade name:** Glutaraldehyde 70% EM Grade

· **Article number:** 16350, 16360, 16365

· **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

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)

Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)

Emgrid Australia Pty. Ltd.

P.O. Box 118

The Patch VIC 3792

Australia

Tel: 03 9752 1785

Fax: 03 9752 1784

Website: www.emgrid.com.au

· **Further information obtainable from:** Product safety department

· **Emergency telephone number:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

## 2 Hazards identification

· **Classification of the substance or mixture**



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 health hazard

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

STOT SE 1 H370 Causes damage to organs.



GHS05 corrosion

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AU

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

Trade name: **Glutaraldehyde 70% EM Grade**

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*Skin Corr. 1A H314 Causes severe skin burns and eye damage.*

*Eye Dam. 1 H318 Causes serious eye damage.*



GHS07

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

*Flam. Liq. 4 H227 Combustible liquid.*

· **Label elements**

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05

GHS06

GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*Glutaraldehyde*

· **Hazard statements**

*Combustible liquid.*

*Toxic if swallowed, in contact with skin or if inhaled.*

*Causes severe skin burns and eye damage.*

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

*May cause an allergic skin reaction.*

*Causes damage to organs.*

· **Precautionary statements**

*In case of inadequate ventilation wear respiratory protection.*

*Avoid breathing dust/fume/gas/mist/vapours/spray.*

*Wear protective gloves / eye protection / face protection.*

*Wear protective gloves.*

*Wear eye protection / face protection.*

*Avoid release to the environment.*

*Wash 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 should not be allowed out of the workplace.*

*IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*

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

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

*Continue rinsing.*

*Specific treatment (see on this label).*

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

*Wash contaminated clothing before reuse.*

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

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

*Collect spillage.*

*Store locked up.*

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

*Store in a well-ventilated place. Keep cool.*

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

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

**Trade name: Glutaraldehyde 70% EM Grade**

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

### 3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.
- **Dangerous components:** Void
- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Remove breathing equipment only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for 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:**  
Do not induce vomiting; call for medical help immediately.  
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **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:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 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).

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 28.09.2015

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**Trade name: Glutaraldehyde 70% EM Grade**

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- Use neutralising agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.
- **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.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **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 container tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making 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.
- Store protective clothing separately.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.
- **Respiratory protection:**
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

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

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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.

· **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>Colour:</b>	Clear
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	101 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

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

· **Vapour pressure:** Not determined.

· <b>Density at 20 °C:</b>	1.143 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with water:** Fully miscible.

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- |   |  |
|---|--|
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| · <b>Viscosity:</b>                               |  |
| <b>Dynamic:</b>                                   | Not determined.                            |
| <b>Kinematic:</b>                                 | Not determined.                            |
| · <b>Solvent content:</b>                         |  |
| <b>Organic solvents:</b>                          | 0.0 %                                      |
| <b>VOC (EC)</b>                                   | 0.00 %                                     |
| · <b>Other information</b>                        | No further relevant information available. |

### 10 Stability and reactivity

- **Reactivity**
- **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.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation**  
Sensitisation possible through inhalation.  
Sensitisation possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Toxic  
Harmful  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:**  
Water hazard class 3 (German Regulation) (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 sewage water or drainage ditch undiluted or unneutralised.  
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.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- |   |  |
|---|--|
| · <b>UN-Number</b>  | UN2922   |
| · <b>ADG, IMDG, IATA</b>  |  |
| · <b>UN proper shipping name</b>  | 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS |
| · <b>ADG</b>  |  |
| · <b>IMDG, IATA</b>   | CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)                                 |
| · <b>Transport hazard class(es)</b>   |  |
| · <b>ADG, IMDG</b>  |  |
|    |  |
| · <b>Class</b>  | 8 Corrosive substances.  |
| · <b>Label</b>  | 8(6.1)   |
| · <b>IATA</b>   |  |
|   |  |
| · <b>Class</b>  | 8 Corrosive substances.  |
| · <b>Label</b>  | 8 (6.1)  |
| · <b>Packing group</b>  | II   |
| · <b>ADG, IMDG, IATA</b>  |  |
| · <b>Environmental hazards:</b>   | Product contains environmentally hazardous substances:<br>Glutaraldehyde         |

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· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Warning: Corrosive substances.
· <b>Danger code (Kemler):</b>	88
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Acids
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN2922, CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS, 8(6.1), II

### 15 Regulatory information

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

· **Australian Inventory of Chemical Substances**

None of the ingredients is listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05    GHS06    GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*Glutaraldehyde*

· **Hazard statements**

*Combustible liquid.*

*Toxic if swallowed, in contact with skin or if inhaled.*

*Causes severe skin burns and eye damage.*

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

*May cause an allergic skin reaction.*

*Causes damage to organs.*

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· **Precautionary statements**

*In case of inadequate ventilation wear respiratory protection.*  
*Avoid breathing dust/fume/gas/mist/vapours/spray.*  
*Wear protective gloves / eye protection / face protection.*  
*Wear protective gloves.*  
*Wear eye protection / face protection.*  
*Avoid release to the environment.*  
*Wash 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 should not be allowed out of the workplace.*  
*IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*  
*IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*  
*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*  
*Continue rinsing.*  
*Specific treatment (see on this label).*  
*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*  
*Wash contaminated clothing before reuse.*  
*If skin irritation or rash occurs: Get medical advice/attention.*  
*IF SWALLOWED: rinse mouth. Do NOT induce vomiting.*  
*Collect spillage.*  
*Store locked up.*  
*Store in a well-ventilated place. Keep container tightly closed.*  
*Store in a well-ventilated place. Keep cool.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **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*  
*IATA: International Air Transport Association*  
*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)*  
*VOC: Volatile Organic Compounds (USA, EU)*  
*Flam. Liq. 4: Flammable liquids, Hazard Category 4*  
*Acute Tox. 3: Acute toxicity, Hazard Category 3*  
*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*  
*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1*  
*Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1*  
*Skin Sens. 1: Sensitisation - Skin, Hazard Category 1*  
*STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1*

# Safety Data Sheet

acc. to OSHA HCS

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## 1 Identification

- **Product identifier**
- **Trade name:** Glutaraldehyde 70% EM Grade
- **Article number:** 16350, 16360, 16365
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3      H301 Toxic if swallowed.  
 Acute Tox. 3      H311 Toxic in contact with skin.  
 Acute Tox. 3      H331 Toxic if inhaled.



GHS08 Health hazard

Resp. Sens. 1      H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 STOT SE 1      H370 Causes damage to organs.



GHS05 Corrosion

Skin Corr. 1A      H314 Causes severe skin burns and eye damage.  
 Eye Dam. 1      H318 Causes serious eye damage.



GHS09 Environment

Aquatic Acute 1      H400 Very toxic to aquatic life.  
 Aquatic Chronic 2      H411 Toxic to aquatic life with long lasting effects.



GHS07

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

*Flam. Liq. 4 H227 Combustible liquid.*

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
Not applicable.



**Very toxic**

*Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.*



**Toxic**

*Toxic by inhalation, in contact with skin and if swallowed.*



**Corrosive**

*Causes severe burns.*



**Irritant**

*Risk of serious damage to eyes. May cause sensitisation by inhalation and skin contact.*

- **Information concerning particular hazards for human and environment:**  
*The product has to be labeled due to the calculation procedure of international guidelines.*
- **Classification system:**  
*The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.*

- **Label elements**

- **Labelling according to EU guidelines:**

*The product has been classified and marked in accordance with directives on hazardous materials.*

- **Code letter and hazard designation of product:**



**Very toxic**

- **Hazard-determining components of labeling:**

*Glutaraldehyde*

- **Risk phrases:**

*Toxic by inhalation, in contact with skin and if swallowed.*

*Causes severe burns.*

*Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.*

*Risk of serious damage to eyes.*

*May cause sensitisation by inhalation and skin contact.*

- **Safety phrases:**

*Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).*

*In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*

*After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.*

*Wear suitable protective clothing, gloves and eye/face protection.*

*In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).*

*This material and its container must be disposed of as hazardous waste.*

- **Hazard description:**

- **WHMIS-symbols:**

*D1A - Very toxic material causing immediate and serious toxic effects*

*D2A - Very toxic material causing other toxic effects*

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E - Corrosive material



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



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



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

### 3 Composition/information on ingredients

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

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Remove breathing apparatus only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for 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:**  
Do not induce vomiting; immediately call for medical help.  
Drink copious amounts of water and provide fresh air. Immediately call a 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.

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### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 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.  
Ensure adequate ventilation.
- **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.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

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- **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.*

*Store protective clothing separately.*

*Avoid contact with the eyes.*

*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.*

- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Liquid

**Color:** Clear

- **Odor:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 101 °C

- **Flash point:** Not applicable.

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· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Not determined.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	1.143 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **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.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**
- Strong caustic effect.
- Strong irritant with the danger of severe eye injury.
- **Sensitization:**
- Sensitization possible through inhalation.
- Sensitization possible through skin contact.

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· **Additional toxicological information:**

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

Toxic

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is 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.

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

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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## 14 Transport information

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· DOT, TDG, IMDG, IATA</li> </ul>	UN2922
<ul style="list-style-type: none"> <li>· UN proper shipping name</li> <li>· DOT</li> <li>· TDG</li> <li>· IMDG, IATA</li> </ul>	Corrosive liquids, toxic, n.o.s. (Glutaraldehyde) 2922 Corrosive liquids, toxic, n.o.s. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)
<ul style="list-style-type: none"> <li>· Transport hazard class(es)</li> <li>· DOT</li> </ul>	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> <li>· TDG, IMDG</li> </ul>	8 Corrosive substances 8(6.1)
	<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	8 Corrosive substances 8(6.1)
<ul style="list-style-type: none"> <li>· IATA</li> </ul>	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	8 Corrosive substances 8 (6.1)
<ul style="list-style-type: none"> <li>· Packing group</li> <li>· DOT, TDG, IMDG, IATA</li> </ul>	II
<ul style="list-style-type: none"> <li>· Environmental hazards:</li> <li>· Marine pollutant:</li> </ul>	Product contains environmentally hazardous substances: Glutaraldehyde No
<ul style="list-style-type: none"> <li>· Special precautions for user</li> <li>· Danger code (Kemler):</li> <li>· EMS Number:</li> <li>· Segregation groups</li> </ul>	Warning: Corrosive substances 88 F-A,S-B Acids
<ul style="list-style-type: none"> <li>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> <li>· DOT</li> <li>· Quantity limitations</li> </ul>	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L

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CA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/28/2015

Reviewed on 09/28/2015

Trade name: **Glutaraldehyde 70% EM Grade**

(Contd. of page 8)

<ul style="list-style-type: none"> <li>· <b>TDG</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN2922, Corrosive liquids, toxic, n.o.s. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS, 8(6.1), II</p>

## 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 is listed.

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

None of the ingredients is listed.

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

None of the ingredients is 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 is listed.

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

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

(Contd. on page 10)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 09/28/2015

Reviewed on 09/28/2015

**Trade name: Glutaraldehyde 70% EM Grade**

(Contd. of page 9)

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**



Very toxic

· **Hazard-determining components of labeling:**

Glutaraldehyde

· **Risk phrases:**

Toxic by inhalation, in contact with skin and if swallowed.

Causes severe burns.

Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Risk of serious damage to eyes.

May cause sensitisation by inhalation and skin contact.

· **Safety phrases:**

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

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

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 09/28/2015 / -

· **Abbreviations and acronyms:**

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)

WHMIS: Workplace Hazardous Materials Information System (Canada)

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Glutaraldehyde 70% EM Grade
- **Article number:** 16350, 16360, 16365
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2      H225 Highly flammable liquid and vapour.



GHS06 skull and crossbones

Acute Tox. 3      H301 Toxic if swallowed.  
Acute Tox. 3      H311 Toxic in contact with skin.  
Acute Tox. 3      H331 Toxic if inhaled.



GHS08 health hazard

Resp. Sens. 1      H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
STOT SE 1      H370 Causes damage to organs.



GHS05 corrosion

Skin Corr. 1A      H314 Causes severe skin burns and eye damage.  
Eye Dam. 1      H318 Causes serious eye damage.



GHS09 environment

(Contd. on page 2)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

**Trade name: Glutaraldehyde 70% EM Grade**

(Contd. of page 1)

*Aquatic Acute 1 H400 Very toxic to aquatic life.**Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.*

GHS07

*Skin Sens. 1 H317 May cause an allergic skin reaction.***· 2.2 Label elements****· Labelling according to Regulation (EC) No 1272/2008***The product is classified and labelled according to the CLP regulation.***· Hazard pictograms**

GHS02

GHS05

GHS06

GHS08

GHS09

**· Signal word Danger****· Hazard-determining components of labelling:***Glutaraldehyde***· Hazard statements***H225 Highly flammable liquid and vapour.**H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.**H314 Causes severe skin burns and eye damage.**H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.**H317 May cause an allergic skin reaction.**H370 Causes damage to organs.**H400 Very toxic to aquatic life.**H411 Toxic to aquatic life with long lasting effects.***· Precautionary statements***P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.**P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P321 Specific treatment (see on this label).**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

**· 3.2 Chemical characterisation: Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:** Void

(Contd. on page 3)



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

**Trade name: Glutaraldehyde 70% EM Grade**

(Contd. of page 2)

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

Supply fresh air or oxygen; call for 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:**

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Dilute with plenty of water.

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

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

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

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **6.4 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.

### SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 4)



**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

**Trade name: Glutaraldehyde 70% EM Grade**

(Contd. of page 3)

- *Open and handle receptacle with care.*
- *Prevent formation of aerosols.*
- **Information about fire - and explosion protection:** *Keep respiratory protective device available.*
- **7.2 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 container tightly sealed.*
- **7.3 Specific end use(s)** *No further relevant information available.*

### **SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical facilities:** *No further data; see item 7.*
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** *The lists valid during the making were used as basis.*
- **8.2 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.*  
*Store protective clothing separately.*  
*Avoid contact with the eyes.*  
*Avoid contact with the eyes and skin.*
- **Respiratory protection:**  
*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*
- **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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**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

Trade name: Glutaraldehyde 70% EM Grade

(Contd. of page 4)

## · Eye protection:



Tightly sealed goggles

### SECTION 9: Physical and chemical properties

## · 9.1 Information on basic physical and chemical properties

## · General Information

## · Appearance:

Form:	Liquid
Colour:	Clear
· Odour:	Characteristic
· Odour threshold:	Not determined.

· pH-value: Not determined.

## · Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	101 °C

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

## · Ignition temperature:

Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

## · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure: Not determined.

· Density at 20 °C: 1.143 g/cm<sup>3</sup>

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water:

Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

## · Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

## · Solvent content:

Organic solvents:	0.0 %
VOC (EC)	0.00 %

(Contd. on page 6)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

Trade name: *Glutaraldehyde 70% EM Grade*

(Contd. of page 5)

· **9.2 Other information** *No further relevant information available.*

### **SECTION 10: Stability and reactivity**

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:** *No further relevant information available.*
- **10.6 Hazardous decomposition products:** *No dangerous decomposition products known.*

### **SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** *Strong caustic effect on skin and mucous membranes.*
- **Serious eye damage/irritation**  
*Strong caustic effect.*  
*Strong irritant with the danger of severe eye injury.*
- **Respiratory or skin sensitisation**  
*Sensitisation possible through inhalation.*  
*Sensitisation possible through skin contact.*
- **Additional toxicological information:**  
*The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:*  
*Toxic*  
*Harmful*  
*Corrosive*  
*Irritant*  
*Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.*

### **SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **12.2 Persistence and degradability** *No further relevant information available.*
- **12.3 Bioaccumulative potential** *No further relevant information available.*
- **12.4 Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:**  
*Water hazard class 3 (German Regulation) (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 sewage water or drainage ditch undiluted or unneutralised.*  
*Danger to drinking water if even extremely small quantities leak into the ground.*
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

(Contd. on page 7)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

Trade name: Glutaraldehyde 70% EM Grade

(Contd. of page 6)

· 12.6 Other adverse effects No further relevant information available.

**SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

## · 14.1 UN-Number

· ADR, IMDG, IATA

UN2922

## · 14.2 UN proper shipping name

· ADR

2922 CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde),  
ENVIRONMENTALLY HAZARDOUS

· IMDG, IATA

CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)

## · 14.3 Transport hazard class(es)

· ADR, IMDG



· Class

8 Corrosive substances.

· Label

8(6.1)

· IATA



· Class

8 Corrosive substances.

· Label

8 (6.1)

## · 14.4 Packing group

· ADR, IMDG, IATA

II

## · 14.5 Environmental hazards:

Product contains environmentally hazardous substances:  
Glutaraldehyde

· Marine pollutant:

No

## · 14.6 Special precautions for user

Warning: Corrosive substances.

· Danger code (Kemler):

88

· EMS Number:

F-A,S-B

· Segregation groups

Acids

· 14.7 Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code

Not applicable.

(Contd. on page 8)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.09.2015

Revision: 28.09.2015

**Trade name: Glutaraldehyde 70% EM Grade**

(Contd. of page 7)

**· Transport/Additional information:****· ADR**

- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml
- **Transport category** 2
- **Tunnel restriction code** E

**· IMDG**

- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

**· UN "Model Regulation":**

UN2922, CORROSIVE LIQUID, TOXIC, N.O.S.  
(Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS,  
8(6.1), II

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

**· 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  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 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)  
 VOC: Volatile Organic Compounds (USA, EU)  
 Flam. Liq. 2: Flammable liquids, Hazard Category 2  
 Acute Tox. 3: Acute toxicity, Hazard Category 3  
 Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A  
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1  
 Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1  
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
 STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1  
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

# Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

Trykdato: 28.09.2015

Revision: 28.09.2015

## PUNKT 1: Identifikation af stoffet/blandingen og af selskabet/virksomheden

- **1.1 Produktidentifikator**
- **Handelsnavn:** Glutaraldehyde 70% EM Grade
- **Artikelnummer:** 16350, 16360, 16365
- **1.2 Relevante identificerede anvendelser for stoffet eller blandingen samt anvendelser, der frarådes**  
Der står ingen yderligere, relevante informationer til rådighed.
- **Stoffets/præparatets anvendelse** Laboratoriekemikalier
- **1.3 Nærmere oplysninger om leverandøren af sikkerhedsdatabladet**
- **Producent/leverandør**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **For yderligere information:** Product safety department
- **1.4 Nødtelefon:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## PUNKT 2: Fareidentifikation

- **2.1 Klassificering af stoffet eller blandingen**
- **Klassificering i henhold til forordning (EF) nr. 1272/2008**



GHS02 flamme

Flam. Liq. 2      H225 Meget brandfarlig væske og damp.



GHS06 dødningshoved og korslagte knogler

Acute Tox. 3      H301 Giftig ved indtagelse.  
Acute Tox. 3      H311 Giftig ved hudkontakt.  
Acute Tox. 3      H331 Giftig ved indånding.



GHS08 sundhedsfarer

Resp. Sens. 1      H334 Kan forårsage allergi- eller astmasymptomer eller åndedrætsbesvær ved indånding.  
STOT SE 1      H370 Forårsager organskader.



GHS05 ætsning

Skin Corr. 1A      H314 Forårsager svære forbrændinger af huden og øjenskader.  
Eye Dam. 1      H318 Forårsager alvorlig øjenskade.



GHS09 miljø

(Fortsættes på side 2)

# Sikkerhedsdatablad

## ifølge 1907/2006/EF, Artikel 31

Trykdato: 28.09.2015

Revision: 28.09.2015

**Handelsnavn: Glutaraldehyde 70% EM Grade**

(Fortsat fra side 1)

*Aquatic Acute 1 H400 Meget giftig for vandlevende organismer.*

*Aquatic Chronic 2 H411 Giftig for vandlevende organismer, med langvarige virkninger.*



GHS07

*Skin Sens. 1 H317 Kan forårsage allergisk hudreaktion.*

### · 2.2 Mærkningselementer

#### · Mærkning i henhold til forordning (EF) nr. 1272/2008

*Dette produkt er klassificeret og mærket iht. CLP-forordningen.*

#### · Farepiktogrammer



GHS02

GHS05

GHS06

GHS08

GHS09

#### · Signalord Fare

#### · Farebestemmende komponent(er) til etikettering:

*glutaral*

#### · Faresætninger

*H225*

*Meget brandfarlig væske og damp.*

*H301+H311+H331 Giftig ved indtagelse, hudkontakt eller indånding.*

*H314*

*Forårsager svære forbrændinger af huden og øjenskader.*

*H334*

*Kan forårsage allergi- eller astmasymptomer eller åndedrætsbesvær ved indånding.*

*H317*

*Kan forårsage allergisk hudreaktion.*

*H370*

*Forårsager organskader.*

*H400*

*Meget giftig for vandlevende organismer.*

*H411*

*Giftig for vandlevende organismer, med langvarige virkninger.*

#### · Sikkerhedsætninger

*P301+P310*

*I TILFÆLDE AF INDTAGELSE: Ring omgående til en GIFTINFORMATION/læge.*

*P303+P361+P353 VED KONTAKT MED HUDEN (eller håret): Alt tilsmudset tøj tages straks af. Skyl/brus huden med vand.*

*P305+P351+P338 VED KONTAKT MED ØJNENE: Skyl forsigtigt med vand i flere minutter. Fjern eventuelle kontaktlinser, hvis dette kan gøres let. Fortsæt skylning.*

*P321*

*Særlig behandling (se på denne etiket).*

*P405*

*Opbevares under lås.*

*P501*

*Bortskaffelse af indholdet/beholderen i henhold til de lokale/regionale/nationale/internationale forskrifter.*

#### · 2.3 Andre farer

#### · Resultater af PBT- og vPvB-vurdering

· **PBT:** Ikke relevant.

· **vPvB:** Ikke relevant.

## PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

#### · 3.2 Kemisk betegnelse: Blandinger

· **Beskrivelse:** Blanding med nedenstående stoffer med ufarlige tilsætningsstoffer.

· **Farlige indholdsstoffer:** Ikke relevant

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· **Yderligere anvisninger:** Teksten til de anførte farehenvísninger fremgár af kapitel 16.

### PUNKT 4: Førstehjælpsforanstaltninger

#### · 4.1 Beskrivelse af førstehjælpsforanstaltninger

##### · **Generelle anvisninger:**

Tøj, der er forurenet med produktet, skal tages af med det samme.

Ándedrætsværnet må først tages af, efter at det forurenede tøj er blevet fjernet.

I tilfælde af uregelmæssigt ándedræt eller hvis ándedrættet ophører, skal der gives kunstigt ándedræt.

##### · **Efter indånding:**

Tilførsel af frisk luft eller ilt. Søg lægehjælp.

I tilfælde af bevidstløshed skal den tilskadekomne lægges ned og transporteres i stabilt sideleje.

##### · **Efter hudkontakt:** Skal omgående vaskes af med vand og sæbe, skyl godt efter.

##### · **Efter øjenkontakt:** Skyl øjnene med åbent øjenlåg i flere minutter under rindende vand og søg læge.

##### · **Efter indtagelse:**

Fremkald ikke opkastning, tilkald straks lægehjælp.

Drik rigeligt vand og sørg for frisk luft. Tilkald omgående læge.

#### · 4.2 Vigtigste symptomer og virkninger, både akutte og forsinkede

Der står ingen yderligere, relevante informationer til rådighed.

#### · 4.3 Angivelse af om øjeblikkelig lægehjælp og særlig behandling er nødvendig

Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 5: Brandbekæmpelse

#### · 5.1 Slukningsmidler

##### · **Egnede slukningsmidler:**

CO<sub>2</sub>, slukningspulver eller vandspraystråle. Større brande bekæmpes med vandspraystråle eller alkoholbestandigt skum.

#### · 5.2 Særlige farer i forbindelse med stoffet eller blandingen

Der står ingen yderligere, relevante informationer til rådighed.

#### · 5.3 Anvisninger for brandmandskab

##### · **Særlige værnemidler:** Bær ándedrætsværn.

### PUNKT 6: Forholdsregler over for udslip ved uheld

#### · 6.1 Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer

Bær beskyttelsesudstyr. Hold ubeskyttede personer borte.

#### · 6.2 Miljøbeskyttelsesforanstaltninger:

Fortynd med rigeligt vand.

Må ikke udledes i kloaksystemet/overfladevand/grundvand.

#### · 6.3 Metoder og udstyr til inddæmning og oprensning:

Opsamles med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, savsmuld).

Brug neutraliseringsmiddel.

Kontamineret materiale skal bortskaffes som affald ifølge punkt 13.

Sørg for tilstrækkelig udluftning.

#### · 6.4 Henvisning til andre punkter

Information om sikker håndtering se kapitel 7.

Informationer vedrørende personlige værnemidler se kapitel 8.

Informationer om bortskaffelse se kapitel 13.

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### PUNKT 7: Håndtering og opbevaring

- **7.1 Forholdsregler for sikker håndtering**  
Sørg for god udluftning/udsugning på arbejdspladsen.  
Beholdere skal åbnes og håndteres med forsigtighed.  
Undgå aerosoldannelse.
- **Anvisninger vedrørende brand- og eksplosionsbeskyttelse:** Hold åndedrætsværn i beredskab.
- **7.2 Betingelser for sikker opbevaring, herunder eventuel uforenelighed**
- **Opbevaring:**
- **Krav til opbevaringsrum og beholdere:** Ingen særlige krav.
- **Henvisninger vedrørende opbevaring med andre stoffer:** Ikke påkrævet.
- **Yderligere oplysninger vedrørende opbevaringsbetingelserne:** Hold beholderen tætsluttende lukket.
- **7.3 Særlige anvendelser** Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 8: Eksponeringskontrol/personlige værnemidler

- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.
- **8.1 Kontrolparametre**
- **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:**  
Produktet indeholder ingen relevante mængder af stoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges.
- **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.
- **8.2 Eksponeringskontrol**
- **Personlige værnemidler:**
- **Generelle forholdsregler vedrørende beskyttelse og hygiejne:**  
Skal holdes borte fra føde- og drikkevarer og foderstoffer.  
Forurenet, gennemvædet tøj skal det tages af med det samme.  
Vask hænder inden der holdes pause og ved arbejdsophør.  
Adskilt opbevaring af beskyttelsesklædning.  
Undgå kontakt med øjnene.  
Undgå kontakt med øjne og hud.
- **Åndedrætsværn:**  
Ved kortvarig eller ringe belastning skal der benyttes åndedrætsværn med filter, ved intensiv eller længere eksponering skal der benyttes luftforsynet åndedrætsværn.
- **Håndbeskyttelse:**



Beskyttelseshandsker

- Handskematerialet skal være uigennemtrængeligt og kunne tåle produktet/stoffet/præparatet.  
På grund af manglende tests kan der ikke anbefales noget handskemateriale til produktet/præparatet/kemikalieblandingen.  
Ved valg af handskematerialet skal der tages højde for gennemtrængningstider, permeabilitetstal og nedbrydning.
- **Handskemateriale:**  
Valg af en egnet handske afhænger ikke blot af materialet, men også af yderligere kvalitetskriterier og er forskelligt fra den ene fabrikant til den anden. Da produktet er et præparat af flere forskellige stoffer, kan handskematerialernes bestandighed ikke beregnes på forhånd og skal derfor efterprøves inden brugen.
  - **Handskematerialets gennemtrængningstid**  
Hos handskefabrikanten skal man forespørge om den nøjagtige gennemtrængningstid og overholde denne.

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## · Øjenbeskyttelse:



Tætsluttende beskyttelsesbriller

## PUNKT 9: Fysisk-kemiske egenskaber

## · 9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber

## · Generelle oplysninger

## · Udseende:

Form: Væske

Farve: Klar

· Lugt: Karakteristisk

· Lugttærskel: Ikke bestemt.

· pH-værdi: Ikke bestemt.

## · Tilstandsændring

Smeltepunkt/smelteområde Ikke bestemt.

Kogepunkt/kogeområde 101 °C

· Flammepunkt: Ikke relevant.

· Antændelighed (fast, i luftform): Ikke relevant.

## · Antændelsepunkt:

Nedbrydningsstemperatur: Ikke bestemt.

· Selvantændelighed: Produktet er ikke selvantændeligt.

· Eksplosionsfare: Ikke bestemt.

## · Eksplosionsgrænser:

Nedre: Ikke bestemt.

Øvre: Ikke bestemt.

· Damptryk: Ikke bestemt.

· Densitet ved 20 °C: 1,143 g/cm<sup>3</sup>

· Relativ densitet Ikke bestemt.

· Damptæthed Ikke bestemt.

· Fordampningshastighed Ikke bestemt.

· Opløselighed i/blandbarhed med vand: Fuldt blandbar.

· Fordelingskoefficient (n-octanol/vand): Ikke bestemt.

## · Viskositet:

dynamisk: Ikke bestemt.

kinematisk: Ikke bestemt.

## · Opløsningsmiddelindhold:

Organiske opløsningsmidler: 0,0 %

VOC (EU) 0,00 %

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**· 9.2 Andre oplysninger**

Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet**
- **10.2 Kemisk stabilitet**
- **Termisk nedbrydning/forhold, der bør undgås** Ingen nedbrydning ved formålsbestemt brug.
- **10.3 Risiko for farlige reaktioner** Der er ikke kendskab til nogen farlige reaktioner.
- **10.4 Forhold, der skal undgås** Der står ingen yderligere, relevante informationer til rådighed.
- **10.5 Materialer, der skal undgås:** Der står ingen yderligere, relevante informationer til rådighed.
- **10.6 Farlige nedbrydningsprodukter:** Der er ikke kendskab til nogen farlige nedbrydningsprodukter.

### PUNKT 11: Toksikologiske oplysninger

- **11.1 Oplysninger om toksikologiske virkninger**
- **Akut toksicitet**
- **Primær irritationsvirkning:**
- **Hudætsning/irritation** Virker stærkt ætsende på hud og slimhinder.
- **Alvorlig øjenskade/øjenirritation**  
Virker stærkt ætsende.  
Virker stærkt lokalirriterende med risiko for alvorlige øjenskader.
- **Respiratorisk sensibilisering eller hudsensibilisering**  
Mulighed for sensibilisering ved indånding.  
Mulighed for sensibilisering ved hudkontakt.
- **Yderligere toksikologiske oplysninger:**  
Ifølge beregningsmetoden i henhold til beregningsmetoden i "EF's almindelige klassificeringsdirektiv for præparater" i sidste gældende udgave har produktet følgende farer:  
Giftig  
Sundhedsskadelig  
Ætsende  
Lokalirriterende  
Virker ved indtagelse stærkt ætsende på mundhulen og svelget samt fare for perforation af spiserøret og maven.

### PUNKT 12: Miljøoplysninger

- **12.1 Toksicitet**
- **Toksicitet i vand:** Der står ingen yderligere, relevante informationer til rådighed.
- **12.2 Persistens og nedbrydelighed** Der står ingen yderligere, relevante informationer til rådighed.
- **12.3 Bioakkumuleringspotentiale** Der står ingen yderligere, relevante informationer til rådighed.
- **12.4 Mobilitet i jord** Der står ingen yderligere, relevante informationer til rådighed.
- **Yderligere økologiske oplysninger:**
- **Generelle anvisninger:**  
Fareklasse for vand 3 (Selvklassificering): stærkt vandforurenende  
Må ikke udledes i grundvandet, vandløb eller kloaksystemet, heller ikke i små mængder.  
Må ikke udledes ufortyndet eller unneutraliseret i spildevandet eller recipienten.  
Risiko for forurening af drikkevandet allerede ved udslip af ganske små mængder i undergrunden.
- **12.5 Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.

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· **12.6 Andre negative virkninger** Der står ingen yderligere, relevante informationer til rådighed.

## PUNKT 13: Forhold vedrørende bortskaffelse

- **13.1 Metoder til affaldsbehandling**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsaffald. Må ikke udledes i kloaksystemet.
- **Urensede emballager:**
- **Anbefaling:** Bortskaffes i overensstemmelse med myndighedernes forskrifter.
- **Anbefalet rengøringsmiddel:** Vand, eventuelt tilsat rengøringsmidler.

## PUNKT 14: Transportoplysninger

- |   |  |
|---|--|
| · <b>14.1 UN-nummer</b><br>· <b>ADR, IMDG, IATA</b>   | UN2922   |
| · <b>14.2 UN-forsendelsesbetegnelse (UN proper shipping name)</b><br>· <b>ADR</b><br>· <b>IMDG, IATA</b>  | 2922 ÆTSENDE VÆSKE, GIFTIG, N.O.S. (glutaral),<br>MILJØFARLIGT<br>CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde) |
| · <b>14.3 Transportfareklasse(r)</b><br>· <b>ADR, IMDG</b>  |  |
|    |  |
| · <b>klasse</b><br>· <b>Faremærkat</b>  | 8 Ætsende stoffer<br>8(6.1)  |
| · <b>IATA</b>   |  |
|   |  |
| · <b>Class</b><br>· <b>Label</b>  | 8 Ætsende stoffer<br>8 (6.1)   |
| · <b>14.4 Emballagegruppe</b><br>· <b>ADR, IMDG, IATA</b>   | II   |
| · <b>14.5 Miljøfarer:</b><br>· <b>Marine pollutant:</b>   | Produkt indeholder miljøfarlige stoffer: glutaral<br>Nej   |
| · <b>14.6 Særlige forsigtighedsregler for brugeren</b><br>· <b>Kemler-tal:</b><br>· <b>EMS-nummer:</b><br>· <b>Segregation groups</b>                                   | Advarsel: Ætsende stoffer<br>88<br>F-A,S-B<br>Acids  |
| · <b>14.7 Bulktransport i henhold til bilag II i MARPOL 73/78 og IBC-koden</b>  | Ikke relevant.   |

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· **Transport/yderligere oplysninger:**

· **ADR**

· **Begrænsede mængder (LQ)**

1L

· **Undtagne mængder (EQ)**

Kode: E2

Største tilladte nettomængde pr. indvendig emballage: 30 ml

Største tilladte nettomængde pr. ydre emballage: 500 ml

· **Transportkategori**

2

· **Tunnelrestriktionskode**

E

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN2922, ÆTSENDE VÆSKE, GIFTIG, N.O.S. (glutaral),  
MILJØFARLIGT, 8(6.1), II

## PUNKT 15: Oplysninger om regulering

· **15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø**

· **Direktiv 2012/18/EU**

· **Navngivne farlige stoffer - BILAG I** Ingen af indholdsstofferne er optaget i listen.

· **Nationale forskrifter:**

· **MAL-Code:**

· **15.2 Kemikaliesikkerhedsvurdering:** Der er ikke udført kemikaliesikkerhedsvurdering.

## PUNKT 16: Andre oplysninger

Alle ovenstående angivelser er baseret på vores aktuelle viden, udgør dog ikke nogen tilsikring af produkttegenskaber og stifter heller ikke noget kontraktligt retsforhold.

· **Forkortelser og akronymer:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

VOC: Volatile Organic Compounds (USA, EU)

Måleteknisk Arbejdshygiejnisk Luftbehov

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 28.09.2015

Herziening van: 28.09.2015

## RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

### · 1.1 Productidentificatie

· **Handelsnaam:** Glutaraldehyde 70% EM Grade

· **Artikelnummer:** 16350, 16360, 16365

### · 1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik

Geen verdere relevante informatie verkrijgbaar.

· **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën

### · 1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad

#### · **Fabrikant/leverancier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Aurion

Binnenhaven 5

6709 PD Wageningen

The Netherlands

Tel: 31 317 415094

Fax: 31 317 415955

email: info@aurion.nl

· **Inlichtingengevende sector:** Product safety department

### · 1.4 Telefoonnummer voor noodgevallen:

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

## RUBRIEK 2: Identificatie van de gevaren

### · 2.1 Indeling van de stof of het mengsel

· **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS02 vlam

Flam. Liq. 2      H225 Licht ontvlambare vloeistof en damp.



GHS06 doodshoofd met gekruiste beenderen

Acute Tox. 3      H301 Giftig bij inslikken.

Acute Tox. 3      H311 Giftig bij contact met de huid.

Acute Tox. 3      H331 Giftig bij inademing.



GHS08 gezondheidsgevaar

Resp. Sens. 1      H334 Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.

STOT SE 1      H370 Veroorzaakt schade aan organen.

(Vervolg op blz. 2)

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(Vervolg van blz. 1)



GHS05 corrosie

Skin Corr. 1A H314 Veroorzaakt ernstige brandwonden en oogletsel.

Eye Dam. 1 H318 Veroorzaakt ernstig oogletsel.



GHS09 milieu

Aquatic Acute 1 H400 Zeer giftig voor in het water levende organismen.

Aquatic Chronic 2 H411 Giftig voor in het water levende organismen, met langdurige gevolgen.



GHS07

Skin Sens. 1 H317 Kan een allergische huidreactie veroorzaken.

### · 2.2 Etiketteringselementen

#### · Etikettering overeenkomstig Verordening (EG) nr. 1272/2008

Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

#### · Gevarenpictogrammen



GHS02



GHS05



GHS06



GHS08



GHS09

#### · Signaalwoord Gevaar

#### · Gevaaraanduidende componenten voor de etikettering:

Glutaaraldehyd

#### · Gevarenaanduidingen

H225 Licht ontvlambare vloeistof en damp.

H301+H311+H331 Giftig bij inslikken, bij contact met de huid en bij inademing.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H334 Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.

H317 Kan een allergische huidreactie veroorzaken.

H370 Veroorzaakt schade aan organen.

H400 Zeer giftig voor in het water levende organismen.

H411 Giftig voor in het water levende organismen, met langdurige gevolgen.

#### · Veiligheidsaanbevelingen

P301+P310 NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.

P303+P361+P353 BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken. Huid met water afspoelen/afdouchen.

P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.

P321 Specifieke behandeling vereist (zie op dit etiket).

P405 Achter slot bewaren.

P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

#### · 2.3 Andere gevaren

#### · Resultaten van PBT- en zPzB-beoordeling

· PBT: Niet bruikbaar.

(Vervolg op blz. 3)



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· **zPzB:** Niet bruikbaar.

(Vervolg van blz. 2)

### RUBRIEK 3: Samenstelling en informatie over de bestanddelen

- **3.2 Chemische karakterisering: Mengsels**
- **Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.
- **Gevaarlijke inhoudstoffen:** Niet van toepassing
- **Aanvullende gegevens:**  
De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

### RUBRIEK 4: Eerstehulpmaatregelen

- **4.1 Beschrijving van de eerstehulpmaatregelen**
- **Algemene informatie:**  
Verontreinigde kleding onmiddellijk uittrekken.  
Ademhalingstoestel pas afnemen nadat de verontreinigde kleding verwijderd is.  
Bij onregelmatige ademhaling of ademstilstand kunstmatige ademhaling toepassen.
- **Na het inademen:**  
Verse lucht of zuurstof toedienen; deskundige medische hulp inroepen.  
Bij bewusteloosheid ligging en vervoer in stabiele zijligging.
- **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.
- **Na oogcontact:** Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.
- **Na inslikken:**  
Geen braken teweegbrengen en onmiddellijk medische hulp raadplegen.  
Drink zeer veel water en voer verse lucht aan. Onmiddellijk een dokter waarschuwen.
- **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.
- **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**  
Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**
- **Geschikte blusmiddelen:**  
CO<sub>2</sub>, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**  
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

### RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures**  
Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.
- **6.2 Milieuvoorzorgsmaatregelen:**  
Met veel water verdunnen.  
Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.
- **6.3 Insluitings- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
Neutralisatiemiddel gebruiken.

(Vervolg op blz. 4)

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Besmet materiaal zoals afval volgens punt 13 verwijderen.

Voor voldoende ventilatie zorgen.

· **6.4 Verwijzing naar andere rubrieken**

Informatie inzake veilig gebruik - zie hoofdstuk 7.

Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.

Informatie inzake berging - zie hoofdstuk 13.

### RUBRIEK 7: Hantering en opslag

· **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**

Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.

Tanks voorzichtig openen en behandelen.

Aërosolvorming vermijden.

· **Informatie m.b.t. brand- en ontploffingsgevaar:** Ademhalingstoestellen gereedhouden.

· **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**

· **Opslag:**

· **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.

· **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.

· **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.

· **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

· **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.

· **8.1 Controleparameters**

· **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**

Het produkt bevat geen relevante hoeveelheden van stoffen, die met betrekking tot de werkplaatsen, qua grenswaarden gecontroleerd moeten worden.

· **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.

· **8.2 Maatregelen ter beheersing van blootstelling**

· **Persoonlijke beschermingsvoorzieningen:**

· **Algemene beschermings- en gezondheidsmaatregelen:**

Verwijderd houden van eet- en drinkwaren.

Verontreinigde kleding onmiddellijk uittrekken.

Vóór de pauze en aan het einde van werktijd handen wassen.

Beschermende kleding afzonderlijk bewaren.

Aanraking met de ogen vermijden.

Aanraking met de ogen en de huid vermijden.

· **Ademhalingsbescherming:**

Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.

· **Handbescherming:**



Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.

Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliënmengsel afgegeven worden.

Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

(Vervolg op blz. 5)

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**· Handschoenmateriaal**

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

**· Doordringingstijd van het handschoenmateriaal**

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

**· Oogbescherming:**


Nauw aansluitende veiligheidsbril

### RUBRIEK 9: Fysische en chemische eigenschappen

**· 9.1 Informatie over fysische en chemische basiseigenschappen**
**· Algemene gegevens**
**· Voorkomen:**

<b>Vorm:</b>	Vloeistof
<b>Kleur:</b>	Helder
<b>· Reuk:</b>	Karakteristiek
<b>· Geurdrempelwaarde:</b>	Niet bepaald.

**· pH-waarde:** Niet bepaald.

**· Toestandsverandering**

<b>Smeltpunt/smeltbereik:</b>	Niet bepaald.
<b>Kookpunt/kookpuntbereik:</b>	101 °C

**· Vlampunt:** Niet bruikbaar.

**· Ontvlambaarheid (vast, gasvormig):** Niet bruikbaar.

**· Ontstekingstemperatuur:**

**Ontbindingstemperatuur:** Niet bepaald.

**· Zelfonsteking:** Het produkt ontbrandt niet uit zichzelf.

**· Ontploffingsgevaar:** Niet bepaald.

**· Ontploffingsgrenzen:**

<b>Onderste:</b>	Niet bepaald.
<b>Bovenste:</b>	Niet bepaald.

**· Dampspanning:** Niet bepaald.

<b>Dichtheid bij 20 °C:</b>	1,143 g/cm <sup>3</sup>
<b>· Relatieve dichtheid</b>	Niet bepaald.
<b>· Dampdichtheid</b>	Niet bepaald.
<b>· Verdampingsnelheid</b>	Niet bepaald.

**· Oplosbaarheid in/mengbaarheid met**

**Water:** Volledig mengbaar.

**· Verdelingscoëfficiënt (n-octanol/water):** Niet bepaald.

**· Viscositeit**

**Dynamisch:** Niet bepaald.

(Vervolg op blz. 6)

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<b>Kinematisch:</b>	Niet bepaald.
<b>Oplosmiddelgehalte:</b>	
<b>Organisch oplosmiddel:</b>	0,0 %
<b>VOC (EG)</b>	0,00 %
<b>9.2 Overige informatie</b>	Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit**
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie** Sterk bijtend effect op de huid en de slijmvliezen.
- **Ernstig oogletsel/oogirritatie**  
Sterk bijtend effect.  
Sterk prikkelend effect met gevaar voor ernstige oogbeschadiging.
- **Sensibilisatie van de luchtwegen/de huid**  
Kan overgevoeligheid veroorzaken bij inademing.  
Kan overgevoeligheid veroorzaken bij contact met de huid.
- **Aanvullende toxicologische informatie:**  
Het produkt vertoont op grond van het berekeningsprocédé van de algemene classificatie-richtlijnen van de EG voor toebereidingen in de laatste geldige redactie de volgende gevaren:  
Vergiftig  
Schadelijk  
Bijtend  
Irriterend  
Bij het slikken sterk bijtende effecten in de mondholte en de keel, bovendien gevaar voor perforatie van de slokdarm en de maag.

### RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL) 5: Zeer vergiftig voor in het water levende organismen.  
Gevaar voor water klasse 3 (D) (Zelfclassificatie): gevaar voor water groot  
Niet lozen in grondwater, oppervlaktewater of riolering, ook niet in kleine hoeveelheden.

(Vervolg op blz. 7)

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Mag niet onverdund of niet geneutraliseerd in oppervlaktewater of in afwateringskanaal geloosd worden.

Gevaar voor drinkwater zelfs bij het uitlopen van zeer geringe hoeveelheden in de ondergrond.

· **12.5 Resultaten van PBT- en zPzB-beoordeling**

· **PBT:** Niet bruikbaar.

· **zPzB:** Niet bruikbaar.

· **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 13: Instructies voor verwijdering

· **13.1 Afvalverwerkingsmethoden**

· **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.

· **Niet gereinigde verpakkingen:**

· **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

· **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

· **14.1 VN-nummer**

· **ADR, IMDG, IATA**

UN2922

· **14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN**

· **ADR**

2922 BIJTENDE VLOEISTOF, GIFTIG, N.E.G.  
(Glutaaraldehyd), MILIEUGEVAARLIJK

· **IMDG, IATA**

CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)

· **14.3 Transportgevarenklasse(n)**

· **ADR, IMDG**



· **klasse**

8 Bijtende stoffen

· **Etiket**

8(6.1)

· **IATA**



· **Class**

8 Bijtende stoffen

· **Label**

8 (6.1)

· **14.4 Verpakkingsgroep:**

· **ADR, IMDG, IATA**

II

· **14.5 Milieugevaren:**

· **Marine pollutant:**

Produkt bevat milieugevaarlijke stoffen: Glutaaraldehyd

Neen

· **14.6 Bijzondere voorzorgen voor de gebruiker**

· **Kemler-getal:**

Waarschuwing: Bijtende stoffen

88

· **EMS-nummer:**

F-A,S-B

(Vervolg op blz. 8)

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· <b>Segregation groups</b>	Acids
· <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij MARPOL 73/78 en de IBC-code</b>	Niet bruikbaar.
· <b>Transport/verdere gegevens:</b>	
· <b>ADR</b>	1L
· <b>Beperkte hoeveelheden (LQ)</b>	Code: E2
· <b>Uitgezonderde hoeveelheden (EQ)</b>	Grootste netto hoeveelheid per binnenverpakking: 30 ml Grootste netto hoeveelheid per buitenverpakking: 500 ml
· <b>Vervoerscategorie</b>	2
· <b>Tunnelbeperkingscode</b>	E
-----	
· <b>IMDG</b>	1L
· <b>Limited quantities (LQ)</b>	Code: E2
· <b>Excepted quantities (EQ)</b>	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>VN "Model Regulation":</b>	UN2922, BIJTENDE VLOEISTOF, GIFTIG, N.E.G. (Glutaaraldehyd), MILIEUGEVAARLIJK, 8(6.1), II

### RUBRIEK 15: Regelgeving

#### · 15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel

##### · SZW-lijst van kankerverwekkende stoffen

geen der bestanddelen staat op de lijst.

##### · SZW-lijst van mutagene stoffen

geen der bestanddelen staat op de lijst.

##### · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

geen der bestanddelen staat op de lijst.

##### · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling

geen der bestanddelen staat op de lijst.

##### · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding

geen der bestanddelen staat op de lijst.

##### · Richtlijn 2012/18/EU

· **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** geen der bestanddelen staat op de lijst.

##### · Nationale voorschriften:

· **Gevaarklasse v. water: Waterbezwaarlijkheid (NL) 5: Saneringsinspanning B**

· **15.2 Chemischeveiligheidsbeoordeling: Een chemische veiligheidsbeoordeling is niet uitgevoerd.**

### RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

##### · Afkortingen en acroniemen:

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

(Vervolg op blz. 9)

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*IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**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)**VOC: Volatile Organic Compounds (USA, EU)**Flam. Liq. 2: Flammable liquids, Hazard Category 2**Acute Tox. 3: Acute toxicity, Hazard Category 3**Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A**Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1**Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1**Skin Sens. 1: Sensitisation - Skin, Hazard Category 1**STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2*

-NL-



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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Révision: 28.09.2015

### SECTION 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** Glutaraldehyde 70% EM Grade
- **Code du produit:** 16350, 16360, 16365
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS02 flamme

Flam. Liq. 2      H225 Liquide et vapeurs très inflammables.



GHS06 tête de mort sur deux tibias

Acute Tox. 3      H301 Toxique en cas d'ingestion.  
Acute Tox. 3      H311 Toxique par contact cutané.  
Acute Tox. 3      H331 Toxique par inhalation.



GHS08 danger pour la santé

Resp. Sens. 1      H334 Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.  
STOT SE 1      H370 Risque avéré d'effets graves pour les organes.



GHS05 corrosion

Skin Corr. 1A      H314 Provoque des brûlures de la peau et des lésions oculaires graves.  
Eye Dam. 1      H318 Provoque des lésions oculaires graves.

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GHS09 environnement

*Aquatic Acute 1 H400 Très toxique pour les organismes aquatiques.*

*Aquatic Chronic 2 H411 Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.*



GHS07

*Skin Sens. 1 H317 Peut provoquer une allergie cutanée.*

### · 2.2 Éléments d'étiquetage

· **Étiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.

### · Pictogrammes de danger



GHS02



GHS05



GHS06



GHS08



GHS09

### · **Mention d'avertissement** Danger

### · **Composants dangereux déterminants pour l'étiquetage:**

glutaral

### · **Mentions de danger**

*H225 Liquide et vapeurs très inflammables.*

*H301+H311+H331 Toxique par ingestion, par contact cutané ou par inhalation.*

*H314 Provoque des brûlures de la peau et des lésions oculaires graves.*

*H334 Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.*

*H317 Peut provoquer une allergie cutanée.*

*H370 Risque avéré d'effets graves pour les organes.*

*H400 Très toxique pour les organismes aquatiques.*

*H411 Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.*

### · **Conseils de prudence**

*P301+P310 EN CAS D'INGESTION: Appeler immédiatement un CENTRE ANTIPOISON/un médecin.*

*P303+P361+P353 EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Enlever immédiatement tous les vêtements contaminés. Rincer la peau à l'eau/Se doucher.*

*P305+P351+P338 EN CAS DE CONTACT AVEC LES YEUX: rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.*

*P321 Traitement spécifique (voir sur cette étiquette).*

*P405 Garder sous clef.*

*P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.*

### · 2.3 Autres dangers

### · **Résultats des évaluations PBT et vPvB**

· **PBT:** Non applicable.

· **vPvB:** Non applicable.

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**Nom du produit:** *Glutaraldehyde 70% EM Grade*

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### SECTION 3: Composition/informations sur les composants

- **3.2 Caractérisation chimique: Mélanges**
- **Description:** *Mélange des substances mentionnées à la suite avec des additifs non dangereux.*
- **Composants dangereux:** *néant*
- **Indications complémentaires:** *Pour le libellé des phrases de risque citées, se référer au chapitre 16.*

### SECTION 4: Premiers secours

- **4.1 Description des premiers secours**
- **Remarques générales:**  
*Enlever immédiatement les vêtements contaminés par le produit.  
Ne retirer la protection respiratoire qu'après avoir retiré les vêtements contaminés.  
Respiration artificielle dans le cas d'une respiration irrégulière ou d'un arrêt respiratoire.*
- **Après inhalation:**  
*Donner de l'air frais ou de l'oxygène; demander d'urgence une assistance médicale.  
En cas d'inconscience, coucher et transporter la personne en position latérale stable.*
- **Après contact avec la peau:** *Laver immédiatement à l'eau et au savon et bien rincer.*
- **Après contact avec les yeux:**  
*Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.*
- **Après ingestion:**  
*Ne pas faire vomir, demander d'urgence une assistance médicale.  
Boire de l'eau en abondance et donner de l'air frais. Consulter immédiatement un médecin.*
- **4.2 Principaux symptômes et effets, aigus et différés** *Pas d'autres informations importantes disponibles.*
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**  
*Pas d'autres informations importantes disponibles.*

### SECTION 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:**  
*CO<sub>2</sub>, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.*
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
*Pas d'autres informations importantes disponibles.*
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** *Porter un appareil de protection respiratoire.*

### SECTION 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence**  
*Porter un équipement de sécurité. Eloigner les personnes non protégées.*
- **6.2 Précautions pour la protection de l'environnement:**  
*Diluer avec beaucoup d'eau.  
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.*
- **6.3 Méthodes et matériel de confinement et de nettoyage:**  
*Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Utiliser un neutralisant.  
Évacuer les matériaux contaminés en tant que déchets conformément au point 13.*

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Assurer une aération suffisante.

· **6.4 Référence à d'autres sections**

Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.

Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.

Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### SECTION 7: Manipulation et stockage

· **7.1 Précautions à prendre pour une manipulation sans danger**

Veiller à une bonne ventilation/aspiration du poste de travail.

Ouvrir et manipuler les récipients avec précaution.

Eviter la formation d'aérosols.

· **Préventions des incendies et des explosions:** Tenir des appareils de protection respiratoire prêts.

· **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**

· **Stockage:**

· **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.

· **Indications concernant le stockage commun:** Pas nécessaire.

· **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.

· **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

### SECTION 8: Contrôles de l'exposition/protection individuelle

· **Indications complémentaires pour l'agencement des installations techniques:**

Sans autre indication, voir point 7.

· **8.1 Paramètres de contrôle**

· **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

Le produit ne contient pas en quantité significative des substances présentant des valeurs-seuil à surveiller par poste de travail.

· **Remarques supplémentaires:**

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

· **8.2 Contrôles de l'exposition**

· **Équipement de protection individuel:**

· **Mesures générales de protection et d'hygiène:**

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

Conserver à part les vêtements de protection.

Eviter tout contact avec les yeux.

Eviter tout contact avec les yeux et avec la peau.

· **Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

· **Protection des mains:**



Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

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Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

· **Matériau des gants**

Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.

· **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

· **Protection des yeux:**



Lunettes de protection hermétiques

### SECTION 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**

· **Indications générales**

· **Aspect:**

<b>Forme:</b>	Liquide
<b>Couleur:</b>	Transparent
<b>Odeur:</b>	Caractéristique
<b>Seuil olfactif:</b>	Non déterminé.

· **valeur du pH:** Non déterminé.

· **Changement d'état**

<b>Point de fusion:</b>	Non déterminé.
<b>Point d'ébullition:</b>	101 °C

· **Point d'éclair** Non applicable.

· **Inflammabilité (solide, gazeux):** Non applicable.

· **Température d'inflammation:**

**Température de décomposition:** Non déterminé.

· **Auto-inflammation:** Le produit ne s'enflamme pas spontanément.

· **Danger d'explosion:** Non déterminé.

· **Limites d'explosion:**

<b>Inférieure:</b>	Non déterminé.
<b>Supérieure:</b>	Non déterminé.

· **Pression de vapeur:** Non déterminé.

<b>Densité à 20 °C:</b>	1,143 g/cm <sup>3</sup>
<b>Densité relative</b>	Non déterminé.
<b>Densité de vapeur.</b>	Non déterminé.
<b>Vitesse d'évaporation</b>	Non déterminé.

· **Solubilité dans/miscibilité avec**

**l'eau:** Entièrement miscible

· **Coefficient de partage (n-octanol/eau):** Non déterminé.

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- |                                  |  |
|----------------------------------|--|
| · <b>Viscosité:</b>              |  |
| <b>Dynamique:</b>                | Non déterminé.                                     |
| <b>Cinématique:</b>              | Non déterminé.                                     |
| · <b>Teneur en solvants:</b>     |  |
| <b>Solvants organiques:</b>      | 0,0 %  |
| <b>VOC (CE)</b>                  | 0,00 %   |
| · <b>9.2 Autres informations</b> | Pas d'autres informations importantes disponibles. |

### SECTION 10: Stabilité et réactivité

- **10.1 Réactivité**
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.
- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

### SECTION 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée** Effet fortement corrosif sur la peau et les muqueuses.
- **Lésions oculaires graves/irritation oculaire**  
Effet fortement corrosif.  
Effet fortement irritant avec risque d'une affection grave des yeux.
- **Sensibilisation respiratoire ou cutanée**  
Sensibilisation possible par inhalation.  
Sensibilisation possible par contact avec la peau.
- **Indications toxicologiques complémentaires:**  
Selon le procédé de calcul de la dernière version en vigueur de la directive générale CEE sur la classification des préparations, le produit présente les dangers suivants:  
Toxique  
Nocif  
Corrosif  
Irritant  
L'absorption orale du produit a un fort effet corrosif sur la cavité buccale et le pharynx et présente un danger de perforation du tube digestif et de l'estomac.

### SECTION 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.

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- **Autres indications écologiques:**
- **Indications générales:**  
*Catégorie de pollution des eaux 3 (D) (Classification propre): très polluant*  
*Ne pas laisser pénétrer dans la nappe phréatique, les eaux ou les canalisations, même pas en petite quantité.*  
*Ne doit pas pénétrer à l'état non dilué ou non neutralisé dans les eaux usées ou le collecteur.*  
*Danger pour l'eau potable dès fuite d'une quantité minime dans le sous-sol.*
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

### SECTION 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** *Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.*
- **Emballages non nettoyés:**
- **Recommandation:** *Evacuation conformément aux prescriptions légales.*
- **Produit de nettoyage recommandé:** *Eau, éventuellement avec des produits de nettoyage*

### SECTION 14: Informations relatives au transport

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 No ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <p style="text-align: center;">UN2922</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.2 Nom d'expédition des Nations unies</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul> | <p style="text-align: center;">2922 LIQUIDE CORROSIF, TOXIQUE, N.S.A.<br/>(glutaral), DANGEREUX POUR L'ENVIRONNEMENT<br/>CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)</p> |
| <ul style="list-style-type: none"> <li>· <b>14.3 Classe(s) de danger pour le transport</b></li> <li>· <b>ADR, IMDG</b></li> </ul>                     | <p style="text-align: center;">8 Matières corrosives.<br/>8(6.1)</p>  |
| <ul style="list-style-type: none"> <li>· <b>IATA</b></li> </ul>   | <p style="text-align: center;">8 Matières corrosives.<br/>8 (6.1)</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Groupe d'emballage</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                  | <p style="text-align: center;">II</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Dangers pour l'environnement:</b></li> </ul>   | <p style="text-align: center;"><i>Le produit contient matières dangereuses pour l'environnement : glutaral</i></p>  |

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· <b>Marine Pollutant:</b>	Non
· <b>14.6 Précautions particulières à prendre par l'utilisateur</b>	Attention: Matières corrosives.
· <b>Indice Kemler:</b>	88
· <b>No EMS:</b>	F-A,S-B
· <b>Segregation groups</b>	Acids
· <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol 73/78 et au recueil IBC</b>	Non applicable.
· <b>Indications complémentaires de transport:</b>	
· <b>ADR</b>	
· <b>Quantités limitées (LQ)</b>	1L
· <b>Quantités exceptées (EQ)</b>	Code: E2 Quantité maximale nette par emballage intérieur: 30 ml Quantité maximale nette par emballage extérieur: 500 ml
· <b>Catégorie de transport</b>	2
· <b>Code de restriction en tunnels</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>"Règlement type" de l'ONU:</b>	UN2922, LIQUIDE CORROSIF, TOXIQUE, N.S.A. (glutaral), DANGEREUX POUR L'ENVIRONNEMENT, 8(6.1), II

### SECTION 15: Informations réglementaires

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
- **Directive 2012/18/UE**
- **Substances dangereuses désignées - ANNEXE I** Aucun des composants n'est compris.
- **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

### SECTION 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

#### · **Acronymes et abréviations:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 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)  
 VOC: Volatile Organic Compounds (USA, EU)  
 Flam. Liq. 2: Flammable liquids, Hazard Category 2  
 Acute Tox. 3: Acute toxicity, Hazard Category 3  
 Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

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*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1**Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1**Skin Sens. 1: Sensitisation - Skin, Hazard Category 1**STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2*

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# Sicherheitsdatenblatt

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überarbeitet am: 28.09.2015

### ABSCHNITT 1: Bezeichnung des Stoffs bzw. des Gemischs und des Unternehmens

- **1.1 Produktidentifikator**
- **Handelsname:** Glutaraldehyde 70% EM Grade
- **Artikelnummer:** 16350, 16360, 16365
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com  
  
Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany  
Tel: +49(0)89 18 93 668-0  
safety@scienceservices.de  
  
24h Giftnotruf Munchen: +49 (0)89 19240  
Toxikologische Abteilung der II. Medizinischen Klinik  
rechts der Isar, Munchen. - www.toxinfo.org
- **Auskunftgebender Bereich:** Product safety department
- **1.4 Notrufnummer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### ABSCHNITT 2: Mögliche Gefahren

- **2.1 Einstufung des Stoffs oder Gemischs**
- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS02 Flamme

Flam. Liq. 2      H225 Flüssigkeit und Dampf leicht entzündbar.



GHS06 Totenkopf mit gekreuzten Knochen

Acute Tox. 3      H301 Giftig bei Verschlucken.

Acute Tox. 3      H311 Giftig bei Hautkontakt.

Acute Tox. 3      H331 Giftig bei Einatmen.



GHS08 Gesundheitsgefahr

Resp. Sens. 1      H334 Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.

STOT SE 1      H370 Schädigt die Organe.

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GHS05 Ätzwirkung

Skin Corr. 1A     H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

Eye Dam. 1     H318 Verursacht schwere Augenschäden.



GHS09 Umwelt

Aquatic Acute 1     H400 Sehr giftig für Wasserorganismen.

Aquatic Chronic 2     H411 Giftig für Wasserorganismen, mit langfristiger Wirkung.



GHS07

Skin Sens. 1     H317 Kann allergische Hautreaktionen verursachen.

### · 2.2 Kennzeichnungselemente

#### · Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008

Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

#### · Gefahrenpiktogramme



GHS02



GHS05



GHS06



GHS08



GHS09

#### · Signalwort Gefahr

#### · Gefahrbestimmende Komponenten zur Etikettierung:

Glutaral

#### · Gefahrenhinweise

H225     Flüssigkeit und Dampf leicht entzündbar.

H301+H311+H331 Giftig bei Verschlucken, Hautkontakt oder Einatmen.

H314     Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

H334     Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.

H317     Kann allergische Hautreaktionen verursachen.

H370     Schädigt die Organe.

H400     Sehr giftig für Wasserorganismen.

H411     Giftig für Wasserorganismen, mit langfristiger Wirkung.

#### · Sicherheitshinweise

P301+P310     BEI VERSCHLUCKEN: Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.

P303+P361+P353     BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen/duschen.

P305+P351+P338     BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

P321     Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).

P405     Unter Verschluss aufbewahren.

P501     Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

#### · 2.3 Sonstige Gefahren

#### · Ergebnisse der PBT- und vPvB-Beurteilung

**· PBT: Nicht anwendbar.**

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· **vPvB:** Nicht anwendbar.

### ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

- **3.2 Chemische Charakterisierung: Gemische**
- **Beschreibung:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.
- **Gefährliche Inhaltsstoffe:** entfällt
- **Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

- **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
- **Allgemeine Hinweise:**  
Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.  
Atemschutz erst nach Entfernen verunreinigter Kleidungsstücke abnehmen.  
Bei unregelmäßiger Atmung oder Atemstillstand künstliche Beatmung.
- **Nach Einatmen:**  
Frischluf- oder Sauerstoffzufuhr; ärztliche Hilfe in Anspruch nehmen.  
Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.
- **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.
- **Nach Augenkontakt:**  
Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.
- **Nach Verschlucken:**  
Kein Erbrechen herbeiführen, sofort Arzthilfe zuziehen.  
Reichlich Wasser nachtrinken und Frischluftzufuhr. Unverzüglich Arzt hinzuziehen.
- **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**  
Keine weiteren relevanten Informationen verfügbar.
- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**  
Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:**  
CO<sub>2</sub>, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Atemschutzgerät anlegen.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**  
Schutzausrüstung tragen. Ungeschützte Personen fernhalten.
- **6.2 Umweltschutzmaßnahmen:**  
Mit viel Wasser verdünnen.  
Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**  
Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.

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- Neutralisationsmittel anwenden.
- Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.
- Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**
- Informationen zur sicheren Handhabung siehe Abschnitt 7.
- Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.
- Informationen zur Entsorgung siehe Abschnitt 13.

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**
- Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.
- Behälter mit Vorsicht öffnen und handhaben.
- Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:** Atemschutzgeräte bereithalten.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
- **Lagerklasse:**
- **Klassifizierung nach Betriebsicherheitsverordnung (BetrSichV):** -
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **8.1 Zu überwachende Parameter**
- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**
- Das Produkt enthält keine relevanten Mengen von Stoffen mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten.
- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**
- Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.
- Beschmutzte, getränkte Kleidung sofort ausziehen.
- Vor den Pausen und bei Arbeitsende Hände waschen.
- Getrennte Aufbewahrung der Schutzkleidung.
- Berührung mit den Augen vermeiden.
- Berührung mit den Augen und der Haut vermeiden.
- **Atemschutz:**
- Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.
- **Handschutz:**



Schutzhandschuhe

(Fortsetzung auf Seite 5)

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Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

· **Handschuhmaterial**

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

· **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

· **Augenschutz:**



Dichtschließende Schutzbrille

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

· **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**

· **Allgemeine Angaben**

· **Aussehen:**

**Form:** Flüssigkeit

**Farbe:** Klar

· **Geruch:** Charakteristisch

· **Geruchsschwelle:** Nicht bestimmt.

· **pH-Wert:** Nicht bestimmt.

· **Zustandsänderung**

**Schmelzpunkt/Schmelzbereich:** Nicht bestimmt.

**Siedepunkt/Siedebereich:** 101 °C

· **Flammpunkt:** Nicht anwendbar.

· **Entzündlichkeit (fest, gasförmig):** Nicht anwendbar.

· **Zündtemperatur:**

**Zersetzungstemperatur:** Nicht bestimmt.

· **Selbstentzündlichkeit:** Das Produkt ist nicht selbstentzündlich.

· **Explosionsgefahr:** Nicht bestimmt.

· **Explosionsgrenzen:**

**Untere:** Nicht bestimmt.

**Obere:** Nicht bestimmt.

· **Dampfdruck:** Nicht bestimmt.

· **Dichte bei 20 °C:** 1,143 g/cm<sup>3</sup>

· **Relative Dichte** Nicht bestimmt.

· **Dampfdichte** Nicht bestimmt.

· **Verdampfungsgeschwindigkeit** Nicht bestimmt.

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- |   |  |
|---|--|
| <b>· Löslichkeit in / Mischbarkeit mit Wasser:</b>  | Vollständig mischbar.                              |
| <b>· Verteilungskoeffizient (n-Octanol/Wasser):</b> | Nicht bestimmt.                                    |
| <b>· Viskosität:</b>                                |  |
| <b>Dynamisch:</b>                                   | Nicht bestimmt.                                    |
| <b>Kinematisch:</b>                                 | Nicht bestimmt.                                    |
| <b>· Lösemittelgehalt:</b>                          |  |
| <b>Organische Lösemittel:</b>                       | 0,0 %  |
| <b>VOC (EU)</b>                                     | 0,00 %   |
| <b>· 9.2 Sonstige Angaben</b>                       | Keine weiteren relevanten Informationen verfügbar. |

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität**
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**  
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität**
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut** Starke Ätzwirkung auf Haut und Schleimhäute.
- **Schwere Augenschädigung/-reizung**  
Starke Ätzwirkung.  
Starke Reizwirkung mit Gefahr ernster Augenschäden.
- **Sensibilisierung der Atemwege/Haut**  
Durch Einatmen Sensibilisierung möglich.  
Durch Hautkontakt Sensibilisierung möglich.
- **Zusätzliche toxikologische Hinweise:**  
Das Produkt weist aufgrund des Berechnungsverfahrens der Allgemeinen Einstufungsrichtlinie der EG für Zubereitungen in der letztgültigen Fassung folgende Gefahren auf:  
Giftig  
Gesundheitsschädlich  
Ätzend  
Reizend  
Bei Verschlucken starke Ätzwirkung des Mundraumes und Rachens sowie Gefahr der Perforation der Speiseröhre und des Magens.

### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.

(Fortsetzung auf Seite 7)

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- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
 Wassergefährdungsklasse 3 (Selbsteinstufung): stark wassergefährdend  
 Nicht in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen, auch nicht in kleinen Mengen.  
 Darf nicht unverdünnt bzw. unneutralisiert ins Abwasser bzw. in den Vorfluter gelangen.  
 Trinkwassergefährdung bereits beim Auslaufen geringster Mengen in den Untergrund.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

### ABSCHNITT 14: Angaben zum Transport

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Nummer</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN2922  |
| <ul style="list-style-type: none"> <li>· <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul> | 2922 ÄTZENDER FLÜSSIGER STOFF, GIFTIG, N.A.G.<br>(Glutaral), UMWELTGEFÄHRDEND<br>CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde) |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgefahrenklassen</b></li> <li>· <b>ADR, IMDG</b></li> </ul>                                    | <div style="text-align: center;">  </div>      |
| <ul style="list-style-type: none"> <li>· <b>Klasse</b></li> <li>· <b>Gefahrzettel</b></li> </ul>  | 8 Ätzende Stoffe<br>8(6.1)  |
| <ul style="list-style-type: none"> <li>· <b>IATA</b></li> </ul>   | <div style="text-align: center;">  </div>      |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>  | 8 Ätzende Stoffe<br>8 (6.1)   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Verpackungsgruppe</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                     | II  |

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<ul style="list-style-type: none"> <li>· <b>14.5 Umweltgefahren:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>	<p>Das Produkt enthält umweltgefährdende Stoffe: Glutaral Nein</p>
<ul style="list-style-type: none"> <li>· <b>14.6 Besondere Vorsichtsmaßnahmen für den Verwender</b></li> <li>· <b>Kemler-Zahl:</b></li> <li>· <b>EMS-Nummer:</b></li> <li>· <b>Segregation groups</b></li> </ul>	<p>Achtung: Ätzende Stoffe 88 F-A,S-B Acids</p>
<ul style="list-style-type: none"> <li>· <b>14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens 73/78 und gemäß IBC-Code</b></li> </ul>	<p>Nicht anwendbar.</p>
<ul style="list-style-type: none"> <li>· <b>Transport/weitere Angaben:</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Begrenzte Menge (LQ)</b></li> <li>· <b>Freigestellte Mengen (EQ)</b></li> </ul>	<p>1L Code: E2 Höchste Nettomenge je Innenverpackung: 30 ml Höchste Nettomenge je Außenverpackung: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>Beförderungskategorie</b></li> <li>· <b>Tunnelbeschränkungscode</b></li> </ul>	<p>2 E</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN2922, ÄTZENDER FLÜSSIGER STOFF, GIFTIG, N.A.G. (Glutaral), UMWELTGEFÄHRDEND, 8(6.1), II</p>

### ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- **Richtlinie 2012/18/EU**
- **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Keiner der Inhaltsstoffe ist enthalten.
- **Nationale Vorschriften:**
- **Wassergefährdungsklasse: WGK 3 (Selbsteinstufung):** stark wassergefährdend.
- **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

### ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

- **Abkürzungen und Akronyme:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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*CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**Flam. Liq. 2: Flammable liquids, Hazard Category 2**Acute Tox. 3: Acute toxicity, Hazard Category 3**Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A**Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1**Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1**Skin Sens. 1: Sensitisation - Skin, Hazard Category 1**STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2*

DE

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 28.09.2015

Revisione: 28.09.2015

### SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** Glutaraldehyde 70% EM Grade

· **Articolo numero:** 16350, 16360, 16365

· **1.2 Usi pertinenti identificati della sostanza o miscela e usi sconsigliati** Non sono disponibili altre informazioni.

· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: www.sichim.com

· **Informazioni fornite da:** Product safety department

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**

· **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS02 fiamma

Flam. Liq. 2      H225 Liquido e vapori facilmente infiammabili.



GHS06 teschio e tibie incrociate

Acute Tox. 3      H301 Tossico se ingerito.

Acute Tox. 3      H311 Tossico per contatto con la pelle.

Acute Tox. 3      H331 Tossico se inalato.



GHS08 pericolo per la salute

Resp. Sens. 1      H334 Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.

STOT SE 1      H370 Provoca danni agli organi.



GHS05 corrosione

Skin Corr. 1A      H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

Eye Dam. 1      H318 Provoca gravi lesioni oculari.

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GHS09 ambiente

*Aquatic Acute 1 H400 Molto tossico per gli organismi acquatici.*

*Aquatic Chronic 2 H411 Tossico per gli organismi acquatici con effetti di lunga durata.*



GHS07

*Skin Sens. 1 H317 Può provocare una reazione allergica cutanea.*

· **2.2 Elementi dell'etichetta**

· **Etichettatura secondo il regolamento (CE) n. 1272/2008**

*Il prodotto è classificato ed etichettato conformemente al regolamento CLP.*

· **Pittogrammi di pericolo**



GHS02



GHS05



GHS06



GHS08



GHS09

· **Avvertenza Pericolo**

· **Componenti pericolosi che ne determinano l'etichettatura:**

*glutarale*

· **Indicazioni di pericolo**

*H225*

*Liquido e vapori facilmente infiammabili.*

*H301+H311+H331 Tossico se ingerito, a contatto con la pelle o se inalato.*

*H314*

*Provoca gravi ustioni cutanee e gravi lesioni oculari.*

*H334*

*Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.*

*H317*

*Può provocare una reazione allergica cutanea.*

*H370*

*Provoca danni agli organi.*

*H400*

*Molto tossico per gli organismi acquatici.*

*H411*

*Tossico per gli organismi acquatici con effetti di lunga durata.*

· **Consigli di prudenza**

*P301+P310*

*IN CASO DI INGESTIONE: contattare immediatamente un CENTRO ANTIVELENI/un medico.*

*P303+P361+P353*

*IN CASO DI CONTATTO CON LA PELLE (o con i capelli): togliere immediatamente tutti gli indumenti contaminati. Sciacquare la pelle/fare una doccia.*

*P305+P351+P338*

*IN CASO DI CONTATTO CON GLI OCCHI: sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.*

*P321*

*Trattamento specifico (vedere su questa etichetta).*

*P405*

*Conservare sotto chiave.*

*P501*

*Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.*

· **2.3 Altri pericoli**

· **Risultati della valutazione PBT e vPvB**

· **PBT:** Non applicabile.

· **vPvB:** Non applicabile.

IT

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### **SEZIONE 3: Composizione/informazioni sugli ingredienti**

- **3.2 Caratteristiche chimiche: Miscela**
- **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.
- **Sostanze pericolose:** non applicabile
- **Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

### **SEZIONE 4: Misure di primo soccorso**

- **4.1 Descrizione delle misure di primo soccorso**
- **Indicazioni generali:**  
Allontanare immediatamente gli abiti contaminati dal prodotto.  
Levarsi la maschera protettiva solamente dopo aver tolto gli abiti contaminati.  
In caso di respirazione irregolare o di blocco respiratorio praticare la respirazione artificiale.
- **Inalazione:**  
Portare il soggetto in zona ben areata o somministrare ossigeno; chiedere l'intervento di un medico.  
Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.
- **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.
- **Contatto con gli occhi:**  
Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.
- **Ingestione:**  
Non provocare il vomito, chiamare subito il medico.  
Bere abbondante acqua e sostare in zona ben areata. Richiedere immediatamente l'intervento del medico.
- **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.
- **4.3 Indicazione della eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**  
Non sono disponibili altre informazioni.

### **SEZIONE 5: Misure antincendio**

- **5.1 Mezzi di estinzione**
- **Mezzi di estinzione idonei:**  
CO<sub>2</sub>, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.
- **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.
- **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
- **Mezzi protettivi specifici:** Indossare il respiratore.

### **SEZIONE 6: Misure in caso di rilascio accidentale**

- **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza**  
Indossare equipaggiamento protettivo. Allontanare le persone non equipaggiate.
- **6.2 Precauzioni ambientali:**  
Diluire abbondantemente con acqua.  
Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.
- **6.3 Metodi e materiali per il contenimento e per la bonifica:**  
Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).  
Utilizzare mezzi di neutralizzazione.  
Smaltimento del materiale contaminato conformemente al punto 13.  
Provvedere ad una sufficiente areazione.
- **6.4 Riferimento ad altre sezioni**  
Per informazioni relative ad una manipolazione sicura, vedere capitolo 7.

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Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.  
Per informazioni relative allo smaltimento vedere Capitolo 13.

### SEZIONE 7: Manipolazione e immagazzinamento

- **7.1 Precauzioni per la manipolazione sicura**  
Accurata ventilazione/aspirazione nei luoghi di lavoro.  
Aprire e manipolare i recipienti con cautela.  
Evitare la formazione di aerosol.
- **Indicazioni in caso di incendio ed esplosione:** Tener pronto il respiratore.
- **7.2 Condizioni per l'immagazzinamento sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.
- **7.3 Usi finali specifici** Non sono disponibili altre informazioni.

### SEZIONE 8: Controllo dell'esposizione/protezione individuale

- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **8.1 Parametri di controllo**
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**  
Il prodotto non contiene quantità rilevanti di sostanze i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro.
- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.
- **8.2 Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**  
Tenere lontano da cibo, bevande e foraggi.  
Togliere immediatamente gli abiti contaminati.  
Lavarsi le mani prima dell'intervallo o a lavoro terminato.  
Custodire separatamente l'equipaggiamento protettivo.  
Evitare il contatto con gli occhi.  
Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:**  
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **Guanti protettivi:**



Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.  
A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.  
Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

(continua a pagina 5)

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**Scheda di dati di sicurezza**  
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· **Materiale dei guanti**

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego

· **Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

· **Occhiali protettivi:**



Occhiali protettivi a tenuta

### SEZIONE 9: Proprietà fisiche e chimiche

· **9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali**

· **Indicazioni generali**

· **Aspetto:**

**Forma:** Liquido

**Colore:** Chiaro

· **Odore:** Caratteristico

· **Soglia olfattiva:** Non definito.

· **valori di pH:** Non definito.

· **Cambiamento di stato**

**Temperatura di fusione/ambito di fusione:** Non definito.

**Temperatura di ebollizione/ambito di ebollizione:** 101 °C

· **Punto di infiammabilità:** Non applicabile.

· **Infiammabilità (solido, gassoso):** Non applicabile.

· **Temperatura di accensione:**

**Temperatura di decomposizione:** Non definito.

· **Autoaccensione:** Prodotto non autoinfiammabile.

· **Pericolo di esplosione:** Non definito.

· **Limiti di infiammabilità:**

**Inferiore:** Non definito.

**Superiore:** Non definito.

· **Tensione di vapore:** Non definito.

· **Densità a 20 °C:** 1,143 g/cm<sup>3</sup>

· **Densità relativa** Non definito.

· **Densità del vapore** Non definito.

· **Velocità di evaporazione** Non definito.

· **Solubilità in/Miscibilità con acqua:**

Completamente miscibile.

· **Coefficiente di distribuzione (n-Octanol/acqua):** Non definito.

· **Viscosità:**

**Dinamica:** Non definito.

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<b>Cinematica:</b>	Non definito.
· <b>Tenore del solvente:</b>	
<b>Solventi organici:</b>	0,0 %
<b>VOC (CE)</b>	0,00 %
· <b>9.2 Altre informazioni</b>	Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

- **10.1 Reattività**
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea** Fortemente corrosivo sulla pelle e sulle mucose.
- **Lesioni oculari gravi/irritazioni oculari gravi**  
Fortemente corrosivo.  
Forte irritazione con rischio di gravi lesioni oculari.
- **Sensibilizzazione respiratoria o cutanea**  
Può provocare sensibilizzazione se inalato.  
Può provocare sensibilizzazione a contatto con la pelle.
- **Ulteriori dati tossicologici:**  
Il prodotto, in base al metodo di calcolo della direttiva generale della Comunità sulla classificazione dei preparati nella sua ultima versione valida, presenta i seguenti rischi:  
Tossico  
Nocivo  
Corrosivo  
Irritante  
Se ingerito provoca forte corrosione della cavità orale e della faringe con rischio di perforazione dell'esofago e dello stomaco.

### SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
Pericolosità per le acque classe 3 (D) (Autoclassificazione): molto pericoloso  
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature, anche in piccole dosi.  
Non immettere il prodotto non diluito o non neutralizzato nelle acque di scarico e nei canali di raccolta.

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- Pericolo per le acque potabili anche in caso di perdite nel sottosuolo di quantità minime di prodotto.*
- **12.5 Risultati della valutazione PBT e vPvB**
  - **PBT:** Non applicabile.
  - **vPvB:** Non applicabile.
  - **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.
- **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

### SEZIONE 14: Informazioni sul trasporto

- |   |  |
|---|--|
| · <b>14.1 Numero ONU</b>  | UN2922   |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>14.2 Nome di spedizione dell'ONU</b>   | 2922 LIQUIDO CORROSIVO TOSSICO, N.A.S. (glutarale),<br>PERICOLOSO PER L'AMBIENTE |
| · <b>ADR</b>  |  |
| · <b>IMDG, IATA</b>   | CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)                                 |
| · <b>14.3 Classi di pericolo connesso al trasporto</b>  |  |
| · <b>ADR, IMDG</b>  |  |
|    |  |
| · <b>Classe</b>   | 8 Materie corrosive  |
| · <b>Etichetta</b>  | 8(6.1)   |
| · <b>IATA</b>   |  |
|   |  |
| · <b>Class</b>  | 8 Materie corrosive  |
| · <b>Label</b>  | 8 (6.1)  |
| · <b>14.4 Gruppo di imballaggio</b>   | II   |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>14.5 Pericoli per l'ambiente:</b>  | Il prodotto contiene materie pericolose per l'ambiente:<br>glutarale             |
| · <b>Marine pollutant:</b>  | No   |
| · <b>14.6 Precauzioni speciali per gli utilizzatori</b>   | Attenzione: Materie corrosive  |
| · <b>Numero Kemler:</b>   | 88   |
| · <b>Numero EMS:</b>  | F-A,S-B  |

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· Segregation groups	Acids
· 14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL 73/78 ed il codice IBC	Non applicabile.
· <b>Trasporto/ulteriori indicazioni:</b>	
· ADR	
· Quantità limitate (LQ)	1L
· Quantità esenti (EQ)	Codice: E2 Quantità massima netta per imballaggio interno: 30 ml Quantità massima netta per imballaggio esterno: 500 ml
· Categoria di trasporto	2
· Codice di restrizione in galleria	E
· <b>IMDG</b>	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN2922, LIQUIDO CORROSIVO TOSSICO, N.A.S. (glutarale), PERICOLOSO PER L'AMBIENTE, 8(6.1), II

### SEZIONE 15: Informazioni sulla regolamentazione

- 15.1 Norme e legislazione su salute, sicurezza e ambiente specifiche per la sostanza o la miscela
- Direttiva 2012/18/UE
- Sostanze pericolose specificate - ALLEGATO I Nessuno dei componenti è contenuto.
- 15.2 Valutazione della sicurezza chimica: Una valutazione della sicurezza chimica non è stata effettuata.

### SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· **Abbreviazioni e acronimi:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

VOC: Volatile Organic Compounds (USA, EU)

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

# 안전지침서

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### 1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명: Glutaraldehyde 70% EM Grade**
- **상품번호: 16350, 16360, 16365**
- **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
- **제품의 권고 용도와 사용상의 제한: 실험실화학품**
- **안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보**
- **제조사/수입자/유통업자 정보:**  
 Electron Microscopy Sciences  
 1560 Industry Road  
 USA-Hatfield, PA 19440  
 Tel: 215-412-8400 Fax: 215-412-8450  
 email: sgkcck@aol.com  
 www.emsdiasum.com
- **Samchang Commercial Co., Ltd.**  
 Yeo Eui Do  
 PO Box 1110  
 Seoul, Korea  
 Tel: 82 2 703 3040  
 Fax: 82 2 717 3298
- **추가적인 정보 획득 가능: Product safety department**
- **비상연락 전화번호:**  
 ChemTrec 1-800-424-9300 Contract CCN7661  
 1-703-527-3887

### 2 유해성.위험성

· **순물질 또는 혼합물의 분류**



두개골과 대퇴골

급성 독성(경구) 구분3	H301	삼키면 유독함
급성 독성(경피) 구분3	H311	피부와 접촉하면 유독함
급성 독성(흡입) 구분3	H331	흡입하면 유독함



건강에 위험

호흡기과민성 구분1	H334	흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음
표적장기-1회노출 구분1	H370	신체 중에 손상을 일으킴



부식

피부 부식성/자극성 구분1	H314	피부에 심한 화상과 눈에 손상을 일으킴
심한 눈 손상/자극성 구분1	H318	눈에 심한 손상을 일으킴



환경

(2 쪽에 계속)

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(1 쪽부터계속)

수생환경유해성-급성    구분1 H400 수생생물에 매우 유독함  
 수생환경유해성-만성    구분2 H411 장기적인 영향에 의해 수생생물에게 유독함



피부과민성    구분1                      H317 알레르기성 피부 반응을 일으킬 수 있음

**· 라벨표기 요소**

**· GHS 라벨 요소**

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

**· 그림문자**



GHS05    GHS06    GHS08    GHS09

**· 신호어 위험**

**· 상표상에명확히위험성이표시된성분:**

Glutaraldehyde

**· 유해.위험 문구**

- 삼키거나 피부에 접촉하거나 흡입하면 유독함.
- 피부에 심한 화상과 눈에 손상을 일으킴
- 흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음
- 알레르기성 피부 반응을 일으킬 수 있음
- 신체 중에 손상을 일으킴
- 수생생물에 매우 유독함
- 장기적인 영향에 의해 수생생물에게 유독함

**· 예방조치 문구**

- 삼켰을 시: 즉시 독성물질센터/병원 연락 필요.
- 피부(모발)에 접촉 시: 모든 오염된 옷을 즉시 벗으시오 피부를 물/샤워로 헹구시오.
- 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오. (라벨 참조) 처치를 하시오.
- 잠금장치가 있는 저장장소에 저장하시오.
- 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

**· 기타 유해성**

- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

- **화 학 적 특 성:** 혼합물
- **설 명:** 무해한 첨가물이 함유된 아래에 열거된 물질로 만들어진 혼합물.
- **위 험 요 소:** 누락되다

KR

(3 쪽에계속)



# 안전지침서

## 제31조의 1907/2006/EC에 따라

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### 4 응급조치 요령

#### · 응급조치요령 내용

##### · 일반적 정보:

이제품에 의해 오염된 의상은 즉시 제거한다.  
반드시 오염된 의상을 완전히 제거한 후에 호흡보호기를 떼어낸다.  
불규칙적인 호흡이나 호흡정지상태에서는 인공호흡을 실시한다.

##### · 흡입했을 때:

신선한 공기나 산소를 공급받고, 의료진의 도움을 구한다.  
환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.

##### · 피부에 접촉했을 때:

즉시 물과 비누로 씻고 잘 행군다.

##### · 눈에 들어갔을 때:

흐르는 물에 눈을 몇 분 동안 씻어내고 나서, 의사와 상담한다.

##### · 먹었을 때:

구토를 유발시키지 않는다. 즉시 의료진의 도움을 구한다.

물을 충분히 마시고 신선한 공기를 쐬다. 즉시 의사의 도움을 구한다.

##### · 기타 의사의 주의사항:

· 가장 중요한 급·만성 증상 및 영향 추가적인 정보가 존재하지 않습니다.

· 즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후 추가적인 정보가 존재하지 않습니다.

### 5 폭발·화재시 대처방법

#### · 소화제

##### · 적절한 소화제:

이산화탄소, 진화용 석회가루 또는 물방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올이 함유된 거품으로 끈다.

· 본 화학물질이나 혼합물에서 발생하는 특별 유해성 추가적인 정보가 존재하지 않습니다.

##### · 소방관에 대한 권고사항

· 화재 진압 시 착용할 보호구 및 예방조치: 호흡보호장비 설치.

### 6 누출 사고 시 대처방법

· 개인적 예방조치, 보호장비 및 응급처치 절차 안전장비 착용하고, 무방비의 사람은 격리시킨다.

##### · 환경 관련 예방조치:

많은 물로 희석시킨다.  
하수도망/해수면위의물/지하수로도달하지 않게 한다.

##### · 밀폐 및 정화 방법과 소재:

액체가 혼합된 물질(모래, 규조토, 산성 결합물, 일반 결합물, 톱밥)에 흡입되도록 한다.  
중성제를 사용한다.

항목 13에 따라 오염된 물질을 쓰레기로 처분한다.

충분한 환기가 되도록 한다.

##### · 타 섹션 참조

안전관리에 대한 정보는 제7장을 참고하십시오.  
개인보호장비에 대한 정보는 제8장을 참고하십시오.  
쓰레기처리에 대한 정보는 제13장을 참고하십시오.

### 7 취급 및 저장방법

#### · 취급:

##### · 안전 취급을 위한 예방조치

작업장에서는 통풍이 잘 되고 습기 제거가 잘 되게 주의한다.  
조심스럽게 용기를 개봉하거나 취급한다.

(4 쪽에 계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.09.28

개정: 2015.09.28

**제품명: Glutaraldehyde 70% EM Grade**

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- 연무질이형성되는것을피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:** 호흡보호장비를항상비치한다.
- **혼합위험성 등 안전 저장 조건**
- **보관:**
- **안전한 저장 방법:** 특 별 한 요구사항이 없음.
- **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필 요없음
- **보 관 조 건 에 관 한 추 가 적 인 정 보:** 용기를새지않게밀폐한채보관한다.
- **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

### 8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이 상 의 자료는 없음. 항 목 7 을 참고하시 오.
- **통제 변수**
- **화학물질의 노출기준, 생물학적 노출기준 등:**  
본 제품에는 작업장에서 감시가 필요한 주요한 가치의 어떤 해당 재료의 양을 함유하고 있지 않다.
- **추 가 정 보:** 제 조 할 당 시 에 유 효 한 목 록 을 기 초 로 사 용 했 다.
- **노출 통제**
- **개인 보호구**
- **일반적보호조치및위생조치:**  
식품, 음료수와 사료로부터 멀리 떨어뜨려 놓는다.  
더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.  
휴식 전 이 나 작업이 끝날때마다 손을 씻는다.  
방호복은 따로보관한다.  
눈과의 접촉을 피한다.  
눈과 피부와의 접촉은 피한다.
- **호흡기 보호:**  
단 시간 또는 경미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장 기간 노출시에는 호흡보호장비를 사용한다.
- **손 보호:**



보호용 장갑

장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.  
테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.  
투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

- **장갑의재료**  
적합한장갑의선정은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업종에따라서도다르게선정되어야한다. 제품은다양한재료로부터의조제로이루어지는것이기때문에, 장갑재질의안정성은사전에예측되어질수있는것이아니고, 반드시사용전에 (그안전성이) 체크되어야한다.
- **장갑재료의투과시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.
- **눈 보호:**



확조이는보안경

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(5 쪽에계속)

# 안전지침서

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**제품명: Glutaraldehyde 70% EM Grade**

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### 9 물리화학적 특성

· 기본 물리 및 화학적 특성에 대한 정보	
· 일반정보	
· 외형	
· 물리적 상태:	액체
· 색:	밝은
· 냄새:	특색있는
· 후각역치	알맞지않다.
· pH:	알맞지않다.
· 상태변화	
· 녹는점/어는점:	맞지않는
· 초기 끓는점과 끓는점 범위:	101 °C
· 인화점:	해당사항 없음.
· 인화성(고체, 기체):	해당사항 없음.
· 점화온도:	
· 분해 온도:	알맞지않다.
· 자기점화:	이제품은자연발화성이없다.
· 폭발위험:	알맞지않다.
· 인화 또는 폭발 범위의 상한/하한	
· 아래로:	알맞지않다.
· 위로:	알맞지않다.
· 증기압:	알맞지않다.
· 밀도 의경우 20 °C:	1.143 g/cm <sup>3</sup>
· 비중:	알맞지않다.
· 증기밀도:	알맞지않다.
· 증발 속도:	알맞지않다.
· 용해도:	
· 물:	완전히혼합할수있는
· n 옥탄올/물 분배계수:	알맞지않다.
· 점도:	
· 역학성:	알맞지않다.
· 동점성:	알맞지않다.
· 용매내용물	
· 유기용매:	0.0 %
· VOC (EU)	0.00 %
· 기타 정보	추가적인 정보가 존재하지 않습니다.

### 10 안정성 및 반응성

- 반응성
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한 반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.

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# 안전지침서

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**제품명:** Glutaraldehyde 70% EM Grade

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- **혼합 금지 물질:** 추가적인 정보가 존재하지 않습니다.
- **유해분해물질:** 위험성있는분해물질은알려지지않았다.

### 11 독성에 관한 정보

- **독성학적 영향에 대한 정보**
- **급성 독성:**
- **일차적 자극 효과:**
- **피부 부식성 또는 자극성:** 피부와점막에강한부식작용.
- **심한 눈 손상 또는 자극성:**  
강한부식작용  
심각한안구상처의위험이있는강한자극
- **감각화:**  
호흡을통한감각화가가능성이있다.  
피부접촉을통하여감각화가가능성이있다.
- **추가적인 독성에 관한 정보:**  
이제품은유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발효된원고에서아래위험들의사전준비에대하여제시하고있다.  
독성의  
건강에해로운  
부식작용의  
자극적인  
삼킬경우식도나위등의내장기관벽에상처를주는위험과 마찬가지로입주변이나구강에강한부식작용을한다

### 12 환경에 미치는 영향

- **독성**
- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **환경 시스템에서의 행동:**
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **추가적인 생태학 정보:**
- **일반 특징:**  
수질오염등급 3 (자체등급분류): 심하게수질오염이된  
지하수나, 하천으로또는하수도망에도달하지않게한다. 역시극소수의양이라도안된다.  
희석시키지않은채또는중화시키지않은채하수도나배수로에도달하지않게해야한다.  
지하수로아주미세한양이유입되었을경우엔이미식수오염상태이다
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.
- **기타 부작용** 추가적인 정보가 존재하지 않습니다.

### 13 폐기시 주의사항

- **폐기물 처리 방법**
- **권고:** 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- **비위생적 포장:**
- **권고:** 당국의지침에입각한쓰레기처리.

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# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.09.28


개정: 2015.09.28

**제품명:** Glutaraldehyde 70% EM Grade

· **추천 세정제:** 경우에따라서세제가첨가된물

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### 14 운송에 필요한 정보

· 유엔 번호 · ADR, IMDG, IATA	UN2922
· UN 적정 선적명 · ADR  · IMDG, IATA	2922 CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS  CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)
· 교통 위험 클래스 · ADR, IMDG  	8 부식작용하는물질 8(6.1)
· IATA   	8 부식작용하는물질 8 (6.1)
· 용기등급 · ADR, IMDG, IATA	II
· 환경적 유해물질: · 해양오염물질:	이물질은환경에 염물질을함유하고있다 : Glutaraldehyde 아니오
· 이용자 특별 예방조치 · 위험 코드: · EMS-번호: · Segregation groups	경고: 부식작용하는물질 88 F-A,S-B Acids
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.
· 운송/추가 정보:  · ADR · 한정 수량 (LQ) · Excepted quantities (EQ)  · 운송 구분 · 터널 제한 코드	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml  2 E

(8 쪽에계속)

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<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<ul style="list-style-type: none"> <li>· UN "모범 규제":</li> </ul>	UN2922, CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS, 8(6.1), II

### 15 법적 규제현황

- 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률
- GHS 라벨 요소  
본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- 위험 도표



GHS05   GHS06   GHS08   GHS09

- 표지어 위험
- 상표상에명확히위험성이표시된성분:  
Glutaraldehyde
- 위험 문구  
삼키거나 피부에 접촉하거나 흡입하면 유독함.  
피부에 심한 화상과 눈에 손상을 일으킴  
흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음  
알레르기성 피부 반응을 일으킬 수 있음  
신체 중에 손상을 일으킴  
수생생물에 매우 유독함  
장기적인 영향에 의해 수생생물에게 유독함
- 주의 문구  
삼켰을 시: 즉시 독성물질센터/병원 연락 필요.  
피부(모발)에 접촉 시: 모든 오염된 옷을 즉시 벗으시오 피부를 물/샤워로 행구시오.  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오.  
(라벨 참조) 처치를 하시오.  
잠금장치가 있는 저장장소에 저장하시오.  
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출
- 화학물질 안전성 평가: 화학물질 안전성 평가가 수행되지 않음

### 16 그 밖의 참고사항

이보고는우리지식에대한 오늘 날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은 기술하지않았으며계약적인법률관계에기반을두고있지도않다

- 최초 작성일자: 2015.09.28
- 개정 횟수 및 최종 개정일자: 1 / 2015.09.28
- 약어와 두문자어:

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

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IATA: International Air Transport Association  
 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)  
 VOC: Volatile Organic Compounds (USA, EU)  
 급성 독성(경구) 구분3: Acute toxicity, Hazard Category 3  
 피부 부식성/자극성 구분1: Skin corrosion/irritation, Hazard Category 1  
 심한 눈 손상/자극성 구분1: Serious eye damage/eye irritation, Hazard Category 1  
 호흡기과민성 구분1: Sensitisation - Respirat., Hazard Category 1  
 피부과민성 구분1: Sensitisation - Skin, Hazard Category 1  
 표적장기-1회노출 구분1: Specific target organ toxicity - Single exposure, Hazard Category 1  
 수생환경유해성-급성 구분1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
 수생환경유해성-만성 구분2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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# Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 28.09.2015

revidert den: 28.09.2015

## Avsnitt 1: Identifikasjon av kjemikaliyet og ansvarlig firma

- **1.1 Produktidentifikator**
- **Handelsnavn:** Glutaraldehyde 70% EM Grade
- **Artikkelnummer:** 16350, 16360, 16365
- **1.2 Relevante, identifiserte anvendelser av stoffet eller stoffblandingen, samt anvendelser som frarådes**  
Ikke noe mer relevant informasjon tilgjengelig.
- **Bruk av stoffet/ tilberedning** laboratoriekjemikalier
- **1.3 Enkeltopplysninger om foretaket som leverer sikkerhetsdatabladet**
- **Produsent/leverandør:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Avdeling for nærmere informasjon:** Product safety department
- **1.4 Nødnummer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## Avsnitt 2: Viktigste faremomenter

- **2.1 Klassifisering av stoff eller stoffblanding**
- **Klassifisering i henhold til EC-forskrift nr.1272/2008**



GHS02 Flamme

Flam. Liq. 2      H225 Meget brannfarlig væske og damp.



GHS06 Dødningehode med korslagte knokler

Acute Tox. 3      H301 Giftig ved svelging.  
Acute Tox. 3      H311 Giftig ved hudkontakt.  
Acute Tox. 3      H331 Giftig ved innånding.



GHS08 Helsefare

Resp. Sens. 1      H334 Kan gi allergi eller astmasymptomer eller pustevansker ved innånding.  
STOT SE 1      H370 Forårsaker organskader.



GHS05 Etsende virkning

Skin Corr. 1A      H314 Gir alvorlige etseskader på hud og øyne.  
Eye Dam. 1      H318 Gir alvorlig øyeskade.



GHS09 Miljø

(fortsatt på side 2)

# Sikkerhetsdatablad

## iflg. forordning (EF) nr. 1907/2006, Artikkel 31

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(fortsatt fra side 1)

*Aquatic Acute 1 H400 Meget giftig for liv i vann.**Aquatic Chronic 2 H411 Giftig, med langtidsvirkning, for liv i vann.*

GHS07

*Skin Sens. 1 H317 Kan utløse en allergisk hudreaksjon.***· 2.2 Etikettelementer****· Merking iht. bestemmelse (EC) Nr. 1272/2008***Produktet er klassifisert og merket i henhold til CLP-forordningen.***· Farepiktogrammer**

GHS02

GHS05

GHS06

GHS08

GHS09

**· Varselord Fare****· Farebestemmende komponenter ved etikettering:***glutaraldehyd***· Faresetninger***H225**Meget brannfarlig væske og damp.**H301+H311+H331 Giftig ved svelging, hudkontakt eller innånding.**H314**Gir alvorlige etseskader på hud og øyne.**H334**Kan gi allergi eller astmasymptomer eller pustevansker ved innånding.**H317**Kan utløse en allergisk hudreaksjon.**H370**Forårsaker organskader.**H400**Meget giftig for liv i vann.**H411**Giftig, med langtidsvirkning, for liv i vann.***· Sikkerhetssetninger***P301+P310**VED SVELGING: Kontakt umiddelbart et GIFTINFORMASJONSENTER/ en lege.**P303+P361+P353**VED HUDKONTAKT (eller håret): Tilsølte klær må fjernes straks. Skyll/dusj huden med vann.**P305+P351+P338**VED KONTAKT MED ØYNENE: Skyll forsiktig med vann i flere minutter. Fjern eventuelle kontaktlinser dersom dette enkelt lar seg gjøre. Fortsett skyllingen.**P321**Særlig behandling (se på etiketten).**P405**Oppbevares innelåst.**P501**Innholdet / emballasjen skal avhendes i henhold til de lokale / regionale / nasjonale / internasjonale forskrifter.***· 2.3 Andre farer****· Resultater av PBT- og vPvB-vurdering****· PBT:** Ikke brukbar.**· vPvB:** Ikke brukbar.

### Avsnitt 3: Stoffblandingers sammensetning og stoffenes klassifisering

**· 3.2 Kjemisk karakterisering: Blandinger****· Beskrivelse:** Blanding av nedenstående oppførte stoffer med ufarlige tilsetninger.**· Farlige innholdsstoffer:** bortfaller**· Ytterligere informasjoner:** Teksten til de fareangivelsene som er inkludert her, kan konsulteres i kapittel 16.

NO

(fortsatt på side 3)

# Sikkerhetsdatablad

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### Avsnitt 4: Førstehjelpstiltak

- **4.1 Beskrivelse av førstehjelpstiltak**
- **Generelle informasjoner:**  
 Klær som er tilsølt med produktet må fjernes omgående.  
 Åndedrettsbeskyttelse må først fjernes etter at tilsølte klær er fjernet.  
 Kunstig åndedrett ved uregelmessig åndedrett eller åndedrettsstillstand.
- **Etter innånding:**  
 Tilførsel av frisk luft eller surstoff; søk legehjelp.  
 Ved bevisstløshet lagring og transport i stabil sidestilling.
- **Etter hudkontakt:** Vask straks med vann og sepe og skyll godt etterpå.
- **Etter øyekontakt:** Skyll øynene med åpne øyenlokk i flere minutter under rennende vann og tilkall lege.
- **Etter svelging:**  
 Ikke få pasienten til å kaste opp. Tilkall lege straks.  
 Drikk rikelig med vann og sørg for frisk luft. Tilkall lege omgående.
- **4.2 De viktigste symptomer og effekter, både akutt og forsinket** Ikke noe mer relevant informasjon tilgjengelig.
- **4.3 Indikasjon på omgående medisinsk hjelp eller påkrevet spesialbehandling**  
 Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 5: Tiltak ved brannslukning

- **5.1 Sløkkemiddel**
- **Egnede slukningsmidler:**  
 CO<sub>2</sub>, slukningspulver eller vann i spredt stråle. Større branner bekjempes med vann i spredt stråle eller med skum som er motstandsdyktig mot alkohol.
- **5.2 Spesielle farer som oppstår pga. substanser eller blandinger** Ikke noe mer relevant informasjon tilgjengelig.
- **5.3 Informasjon vedr. brannbekjempelse**
- **Spesielt verneutstyr:** Ta på egnet åndedrettsbeskyttelse.

### Avsnitt 6: Tiltak ved utilsiktet utslipp

- **6.1 Personlige vernetiltak, verneutstyr og prosedyrer ved nødsituasjoner**  
 Ta på beskyttelsesdrakt. Hold ubeskyttede personer borte.
- **6.2 Miljøverntiltak:**  
 Fortynn med rikelig med vann.  
 La ikke produktet komme ned i kloakk/overflatevann/grunnvann.
- **6.3 Metoder og materiale for oppsamling og opprensing:**  
 Ta opp stoffet med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, sagflis).  
 Bruk nøytraliseringsmiddel.  
 Bortskaff kontaminert matereriale som avfall i.h.t. punkt 13.  
 Sørg for tilstrekkelig ventilasjon.
- **6.4 Henvvisning til andre avsnitt**  
 Informasjoner om sikker håndtering, se kapittel 7.  
 Informasjoner om personlig beskyttelsesutstyr, se kapittel 8.  
 Informasjoner om bortskaffelse/deponering, se kapittel 13.

### Avsnitt 7: Håndtering og oppbevaring

- **7.1 Forholdsregler for sikker håndtering**  
 Sørg for god ventilasjon/avsugning på arbeidsplassen.  
 Beholderne må åpnes og håndteres forsiktig.

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# Sikkerhetsdatablad

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- Unngå aerosoldannelse.
- **Henvisninger om brann- og eksplosjonsvern:** Hold åndedrettsbeskyttelse i beredskap.
- **7.2 Vilkår for sikker lagring, inkl. eventuelle inkompatibiliteter**
- **Lagring:**
- **Krav til lagerrom og beholdere:** Ingen spesielle krav.
- **Informasjoner om felles lagring:** Ikke nødvendig.
- **Ytterligere informasjoner om lagervilkårene:** Hold beholderne tett tillukket.
- **7.3 Spesiell sluttbruk** Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 8: Eksponeringskontroll og personlig verneutstyr

- **Ytterligere informasjoner om utforming av tekniske anlegg:** Ingen ytterligere informasjoner, se punkt 7.
- **8.1 Kontrollparametere**
- **Komponenter med grenseverdier for arbeidsplass som må overholdes:**  
Produktet inneholder ingen relevante mengder av stoffer med arbeidsplassrelevante grenseverdier som må overvåkes.
- **Ytterligere informasjoner:** Basis: listene som var gyldige ved oppstillingen.
- **8.2 Begrensning og kontroll av eksponering**
- **Personlig verneutstyr:**
- **Generelle verne- og hygienetiltak:**  
Holdes adskilt fra næringsmidler, drikkevarer og fôrstoffer.  
Fjern omgående forurensede, gjennomvåtede klær.  
Vask hendene før arbeidspauser og ved arbeidets slutt.  
Beskyttelsesklær må oppbevares adskilt.  
Unngå berøring med øynene.  
Unngå berøring med øyne og hud.
- **Åndedrettsvern:**  
Ved korttidlig eller liten belastning åndedrettsfilterapparat; ved intensiv eller lengre utsetting: bruk omluft-uavhengig åndedrettsbeskyttelsesapparat.
- **Håndvern:**



Beskyttelseshansker

- Hanskematerialet må være ugjennomtrengelig og bestandig overfor produktet /stoffet /blandingen.  
På grunn av manglende tester kan det ikke gis noen anbefaling om hanskemateriale for produktet / tilberedningsprosessen/kjemikalieblanding.
- Hanskematerialet velges under hensyntagen til holdbarhetstid, gjennomtrengelighet og degradering.
- **hanskemateriale**  
Valget av egnet hanske er ikke bare avhengig av materiale, men også av andre kvalitetskjennetegn og er forskjellig fra produsent til produsent. Da produktet representerer en sammensetning av flere stoffer, kan holdbarheten av hanskematerialet ikke forhåndsberegnes, og denne må testes før bruk.
  - **gjennomtrengingstid for hanskemateriale**  
Den nøyaktige holdbarhetstiden må bringes på det rene hos hanskeprodusenten og overholdes.

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## · Øyevern:



Tettsittende vernebrille

## Avsnitt 9: Fysiske og kjemiske egenskaper

## · 9.1 Informasjon om grunnleggende fysiske og kjemiske egenskaper

## · alminnelige opplysninger

## · Utseende:

Form: Væske

Farge: Klar

· Lukt: Karakteristisk

· Lukterskel: Ikke bestemt.

· pH-verdi: Ikke bestemt.

## · Tilstandsendring

Smeltepunkt/smelteområde: Ikke bestemt.

Kokepunkt/kokeområde: 101 °C

· Flammepunkt: Ikke brukbar.

· Antennelighet (fast, gassformet): Ikke brukbar.

## · Antennelsestemperatur:

Spaltningstemperatur: Ikke bestemt.

· Selvantennelighet: Produktet er ikke selvantennelig.

· Eksplosjonsfare: Ikke bestemt.

## · Eksplosjonsgrenser:

Nedre: Ikke bestemt.

Øvre: Ikke bestemt.

· Damptrykk: Ikke bestemt.

· Tetthet ved 20 °C: 1,143 g/cm<sup>3</sup>

· relativt tetthet: Ikke bestemt.

· damptetthet: Ikke bestemt.

· fordampningshastighet: Ikke bestemt.

· Løslighet i / blandbarhet med vann:

Fullstendig blandbar.

· Fordelingskoeffisient (n-oktanol/vann): Ikke bestemt.

## · Viskositet:

Dynamisk: Ikke bestemt.

Kinematisk: Ikke bestemt.

## · Løsningsmiddelandel:

Organiske løsningsmidler: 0,0 %

VOC (EF) 0,00 %

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NO

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· **9.2 Annen informasjon** Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet**
- **10.2 Kjemisk stabilitet**
- **Termisk spaltning / vilkår som må unngås:** Ingen spaltning ved formålsriktig bruk.
- **10.3 Mulighet for farlige reaksjoner** Det kjennes ingen farlige reaksjoner.
- **10.4 Forhold som bør unngås** Ikke noe mer relevant informasjon tilgjengelig.
- **10.5 Inkompatible materialer:** Ikke noe mer relevant informasjon tilgjengelig.
- **10.6 Farlige nedbrytningsprodukter:** Ingen farlige spaltningsprodukter kjente.

### Avsnitt 11: Opplysninger om helsefare

- **11.1 Informasjon om toksikologiske virkninger**
- **Akutt giftighet**
- **Primær irriteringsvirkning:**
- **Hudetsing/hudirritasjon** Sterk etsende virkning på hud og slimhinner.
- **Alvorlig øyeskade/øyeirritasjon**  
Sterk etsende virkning.  
Sterk etsende virkning med fare for alvorlige øyenskader.
- **Sensibiliserende ved innånding eller hudkontakt**  
Ved innånding er sensibilisering mulig  
Ved hudkontakt er sensibilisering mulig
- **Ytterligere toksikologiske henvisninger:**  
På bakgrunn av beregningsmetoden iflg. EF's generelle klassifiserings-retningslinje for tilberedninger i siste gyldige utgave oppviser produktet følgende farer:  
Giftig  
Helseskadelig  
Etsende  
Irriterende  
Ved svelgning sterk etsende virkning av munnhulen og svelget, såvel som fare for perforasjon av spiserøret og magen.

### Avsnitt 12: Miljøopplysninger

- **12.1 Giftighet**
- **Akvatisk toksisitet:** Ikke noe mer relevant informasjon tilgjengelig.
- **12.2 Persistens og nedbrytbarhet** Ikke noe mer relevant informasjon tilgjengelig.
- **12.3 Bioakkumulasjonspotensial** Ikke noe mer relevant informasjon tilgjengelig.
- **12.4 Mobilitet i jord** Ikke noe mer relevant informasjon tilgjengelig.
- **Ytterligere økologiske informasjon:**
- **Generelle informasjon:**  
Vannfareklasse 3 (D) (Selvklassifisering): meget farlig for vann  
Ikke la stoffet komme ned i grunnvannet, i vassdrag eller i kloakker, heller ikke i små mengder.  
Må ikke komme uforynnet eller unøytralisert ned i spillvann eller i avløpsgrøft.  
Fare for drikkevann allerede ved utstrømning av meget små mengder i marken.
- **12.5 Resultater av PBT- og vPvB-vurdering**
- **PBT:** Ikke brukbar.
- **vPvB:** Ikke brukbar.

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· **12.6 Andre skadelige virkninger** Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 13: Fjerning av kjemikalieavfall

- **13.1 Metoder for avfallsbehandling**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsavfall. Må ikke komme ned i kloakk.
- **Ikke rengjort emballasje:**
- **Anbefaling:** Deponering i henhold til myndighetenes forskrifter.
- **Anbefalt rengjøringsmiddel:** Vann, eventuelt med tilsetning av rengjøringsmidler.

### Avsnitt 14: Opplysninger om transport

- |   |   |
|---|---|
| · <b>14.1 UN-nummer:</b><br>· <b>ADR, IMDG, IATA</b>  | UN2922  |
| · <b>14.2 Korrekt UN-forsendelsesbetegnelse</b><br>· <b>ADR</b><br>· <b>IMDG, IATA</b>  | 2922 ETSENDE VÆSKE, GIFTIG, N.O.S.<br>(glutaraldehyd), MILJØSKADELG STOFF<br>CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde) |
| · <b>14.3 transport fareklasser</b><br>· <b>ADR, IMDG</b>   |   |
|    |   |
| · <b>klasse</b><br>· <b>Fareseddel</b>  | 8 Etsende stoffer<br>8(6.1)   |
| · <b>IATA</b>   |   |
|   |   |
| · <b>Class</b><br>· <b>Label</b>  | 8 Etsende stoffer<br>8 (6.1)  |
| · <b>14.4 Emballasjegruppe:</b><br>· <b>ADR, IMDG, IATA</b>   | II  |
| · <b>14.5 Miljøfarer:</b><br>· <b>Marine pollutant:</b>   | Produktet inneholder miljøskadelige stoffer:<br>glutaraldehyd<br>Nei  |
| · <b>14.6 Særskilte forholdsregler for bruker</b><br>· <b>Kemler-tall:</b><br>· <b>EMS-nummer:</b><br>· <b>Segregation groups</b>                                       | Advarsel: Etsende stoffer<br>88<br>F-A,S-B<br>Acids   |
| · <b>14.7 Transport i bulk iht. annekset II til MARPOL 73/78 og til IBC-koden</b>   | Ikke brukbar.   |

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NO



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· **Transport/ytterligere informasjoner:**· **ADR**· **Begrenset mengde (LQ)**

1L

· **Unntatte mengder (EQ)**

Kode: E2

Maksimal nettovekt per inneremballasje: 30 ml

Maksimal nettovekt per ytteremballasje: 500 ml

· **Transportkategori**

2

· **Tunnel restriksjonskode**

E

· **IMDG**· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**UN2922, ETSENDE VÆSKE, GIFTIG, N.O.S.  
(glutaraldehyd), MILJØSKADELG STOFF, 8(6.1), II**Avsnitt 15: Opplysninger om lover og forskrifter**

- **15.1 Helse-, sikkerhets- og miljøforskrifter/lovgivning som gjelder spesielt for stoffet eller stoffblandingen**  
Ikke noe mer relevant informasjon tilgjengelig.
- **15.2 Kjemisk sikkerhetsvurdering:** En kjemisk sikkerhetsvurdering er ikke utført.

**Avsnitt 16: Andre opplysninger av betydning for helse, miljø og sikkerhet**

Opplysningene er basert på vårt kjennskap i dag. De utgjør dog ingen forsikring om produkttegenskaper og er ikke grunnlag for noe kontraktmessig rettsforhold.

· **Forkortelser og akronymer:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

VOC: Volatile Organic Compounds (USA, EU)

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

NO

**Ficha de dados de segurança**  
**Em conformidade com 1907/2006/CE, Artigo 31.º**

data da impressão 28.09.2015

Revisão: 28.09.2015

### SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** Glutaraldehyde 70% EM Grade
- **Código do produto:** 16350, 16360, 16365
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**  
 Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**  
 Electron Microscopy Sciences  
 1560 Industry Road  
 USA-Hatfield, PA 19440  
 Tel: 215-412-8400 Fax: 215-412-8450  
 email: sgkcck@aol.com  
 www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**  
 ChemTrec 1-800-424-9300 Contract CCN7661  
 1-703-527-3887

### SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS02 chama

Flam. Liq. 2      H225 Líquido e vapor facilmente inflamáveis.



GHS06 caveira sobre tóbias cruzadas

Acute Tox. 3      H301 Tóxico por ingestão.  
 Acute Tox. 3      H311 Tóxico em contacto com a pele.  
 Acute Tox. 3      H331 Tóxico por inalação.



GHS08 perigo para a saúde

Resp. Sens. 1      H334 Quando inalado, pode provocar sintomas de alergia ou de asma ou dificuldades respiratórias.  
 STOT SE 1      H370 Afecta os órgãos.



GHS05 corrosão

Skin Corr. 1A      H314 Provoca queimaduras na pele e lesões oculares graves.  
 Eye Dam. 1      H318 Provoca lesões oculares graves.

(continuação na página 2)

# Ficha de dados de segurança

## Em conformidade com 1907/2006/CE, Artigo 31.º

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Revisão: 28.09.2015

Nome comercial: **Glutaraldehyde 70% EM Grade**

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GHS09 ambiente

Aquatic Acute 1 H400 Muito tóxico para os organismos aquáticos.

Aquatic Chronic 2 H411 Tóxico para os organismos aquáticos com efeitos duradouros.



GHS07

Skin Sens. 1 H317 Pode provocar uma reacção alérgica cutânea.

### · 2.2 Elementos do rótulo

#### · Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008

O produto classificou-se e está etiquetado em conformidade com o regulamento CLP.

#### · Pictogramas de perigo



GHS02



GHS05



GHS06



GHS08



GHS09

#### · Palavra-sinal Perigo

#### · Componentes determinantes para os perigos constantes do rótulo:

glutaral

#### · Advertências de perigo

H225 Líquido e vapor facilmente inflamáveis.

H301+H311+H331 Tóxico por ingestão, contacto com a pele ou inalação.

H314 Provoca queimaduras na pele e lesões oculares graves.

H334 Quando inalado, pode provocar sintomas de alergia ou de asma ou dificuldades respiratórias.

H317 Pode provocar uma reacção alérgica cutânea.

H370 Afecta os órgãos.

H400 Muito tóxico para os organismos aquáticos.

H411 Tóxico para os organismos aquáticos com efeitos duradouros.

#### · Recomendações de prudência

P301+P310 EM CASO DE INGESTÃO: contacte imediatamente um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.

P303+P361+P353 SE ENTRAR EM CONTACTO COM A PELE (ou o cabelo): retirar imediatamente toda a roupa contaminada. Enxaguar a pele com água/tomar um duche.

P305+P351+P338 SE ENTRAR EM CONTACTO COM OS OLHOS: enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continuar a enxaguar.

P321 Tratamento específico (ver no presente rótulo).

P405 Armazenar em local fechado à chave.

P501 Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.

#### · 2.3 Outros perigos

#### · Resultados da avaliação PBT e mPmB

· PBT: Não aplicável.

· mPmB: Não aplicável.

PT

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# Ficha de dados de segurança

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### SECÇÃO 3: Composição/informação sobre os componentes

- **3.2 Caracterização química: Misturas**
- **Descrição:** *Mistura das seguintes substâncias com aditivos não perigosos.*
- **Substâncias perigosas:** *não aplicável*
- **Avisos adicionais:** *O texto das indicações de perigo aqui incluído poderá ser consultado no capítulo 16.*

### SECÇÃO 4: Primeiros socorros

- **4.1 Descrição das medidas de primeiros socorros**
- **Indicações gerais:**  
*O vestuário contaminado com substâncias perigosas deve ser imediatamente removido.  
Tirar a protecção respiratória apenas depois de ter sido despido o vestuário contaminado.  
Em caso de respiração irregular ou paragem da respiração, executar respiração artificial.*
- **Em caso de inalação:**  
*Ar fresco ou entrada de oxigénio; solicitar auxílio médico.  
Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.*
- **Em caso de contacto com a pele:** *Lavar imediatamente com água e sabão e enxaguar abundantemente.*
- **Em caso de contacto com os olhos:**  
*Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas, e consultar o médico.*
- **Em caso de ingestão:**  
*Não induzir o vómito; consultar o médico imediatamente.  
Beber bastante água e respirar ar fresco. Consultar imediatamente um médico.*
- **4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados**  
*Não existe mais nenhuma informação relevante disponível.*
- **4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**  
*Não existe mais nenhuma informação relevante disponível.*

### SECÇÃO 5: Medidas de combate a incêndios

- **5.1 Meios de extinção**
- **Meios adequados de extinção:**  
*CO2, pó extintor ou jacto de água. Um incêndio de grandes dimensões deve ser combatido com jacto de água ou espuma resistente ao álcool.*
- **5.2 Perigos especiais decorrentes da substância ou mistura**  
*Não existe mais nenhuma informação relevante disponível.*
- **5.3 Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** *Colocar máscara de respiração.*

### SECÇÃO 6: Medidas a tomar em caso de fugas acidentais

- **6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência**  
*Usar equipamento de protecção. Manter as pessoas desprotegidas afastadas.*
- **6.2 Precauções a nível ambiental:**  
*Diluir em bastante água.  
Evitar que penetre na canalização / águas superficiais / águas subterrâneas.*
- **6.3 Métodos e materiais de confinamento e limpeza:**  
*Recolher com produtos que absorvam líquidos (areia, seixos, absorventes universais, serradura ).  
Aplicar um agente de neutralização.  
Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.*

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Assegurar uma ventilação adequada.

- **6.4 Remissão para outras secções**

Para informações sobre uma manipulação segura, ver o capítulo 7.

Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.

Para informações referentes à eliminação residual, ver o capítulo 13.

### SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro**

Assegurar uma boa ventilação / exaustão no local de trabalho.

Abrir e manusear o recipiente com cuidado

Evitar a formação de aerossóis.

- **Precauções para prevenir incêndios e explosões:** Manter uma máscara de respiração sempre preparada.

- **7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades**

- **Armazenagem:**

- **Requisitos para espaços ou contentores para armazenagem:** Sem requisitos especiais.

- **Avisos para armazenagem conjunta:** Não necessário.

- **Outros avisos sobre as condições de armazenagem:** Manter o recipiente hermeticamente fechado.

- **7.3 Utilizações finais específicas** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 8: Controlo da exposição/protecção individual

- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.

- **8.1 Parâmetros de controlo**

- **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:**

O produto não contém quantidades relevantes de substâncias cujo valor limite relacionado no local de trabalho tenha que ser monitorizado.

- **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.

- **8.2 Controlo da exposição**

- **Equipamento de protecção individual:**

- **Medidas gerais de protecção e higiene:**

Manter afastado de alimentos, bebidas e forragens.

Despir imediatamente a roupa contaminada e embebida.

Lavar as mãos antes das pausas e no fim do trabalho.

Guardar o vestuário de protecção separadamente.

Evitar o contacto com os olhos.

Evitar o contacto com os olhos e com a pele.

- **Protecção respiratória:**

Utilizar uma máscara respiratória se a exposição for reduzida ou durante um curto espaço de tempo; se esta for mais prolongada ou mais intensa, utilizar uma máscara respiratória independente do ar ambiente.

- **Protecção das mãos:**



Luvas de protecção

O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.

Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.

Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.

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· **Material das luvas**

A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante. O facto de o produto ser composto por uma variedade de materiais leva a que não seja possível prever a duração dos mesmos e, conseqüentemente, das luvas, sendo assim necessário proceder a uma verificação antes da sua utilização.

· **Tempo de penetração no material das luvas**

Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.

· **Protecção dos olhos:**



Óculos de protecção totalmente fechados

### SECÇÃO 9: Propriedades físicas e químicas

· **9.1 Informações sobre propriedades físicas e químicas de base**

· **Informações gerais**

· **Aspecto:**

· <b>Forma:</b>	Líquido
· <b>Cor:</b>	Claro
· <b>Odor:</b>	Característico
· <b>Limiar olfactivo:</b>	Não classificado.

· **valor pH:** Não classificado.

· **Mudança do estado:**

· <b>Ponto / intervalo de fusão:</b>	Não classificado.
· <b>Ponto / intervalo de ebulição:</b>	101 °C

· **Ponto de inflamação:** Não aplicável.

· **Inflamabilidade (sólido, gás):** Não aplicável.

· **Temperatura de ignição:**

· **Temperatura de decomposição:** Não classificado.

· **Auto-inflamabilidade:** O produto não é auto-inflamável.

· **Perigos de explosão:** Não classificado.

· **Limites de explosão:**

· <b>Inferior:</b>	Não classificado.
· <b>Superior:</b>	Não classificado.

· **Pressão de vapor:** Não classificado.

· <b>Densidade em 20 °C:</b>	1,143 g/cm <sup>3</sup>
· <b>Densidade relativa</b>	Não classificado.
· <b>Densidade de vapor</b>	Não classificado.
· <b>Velocidade de evaporação</b>	Não classificado.

· **Solubilidade em / miscibilidade com água:**

Completamente misturável.

· **Coefficiente de distribuição (n-octanol/água):** Não classificado.

· **Viscosidade:**

· **Dinâmico:** Não classificado.

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<b>Cinemático:</b>	<i>Não classificado.</i>
<b>· Percentagem de solvente:</b>	
<b>Solventes orgânicos:</b>	<i>0,0 %</i>
<b>VOC (UE)</b>	<i>0,00 %</i>
<b>· 9.2 Outras informações</b>	<i>Não existe mais nenhuma informação relevante disponível.</i>

## SECÇÃO 10: Estabilidade e reactividade

- **10.1 Reactividade**
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** *Não existe decomposição se usado de acordo com as especificações.*
- **10.3 Possibilidade de reacções perigosas** *Não se conhecem reacções perigosas.*
- **10.4 Condições a evitar** *Não existe mais nenhuma informação relevante disponível.*
- **10.5 Materiais incompatíveis:** *Não existe mais nenhuma informação relevante disponível.*
- **10.6 Produtos de decomposição perigosos:** *Não se conhecem produtos de decomposição perigosos.*

## SECÇÃO 11: Informação toxicológica

- **11.1 Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda**
- **Efeito de irritabilidade primário:**
- **Corrosão/irritação cutânea** *Forte efeito corrosivo na pele e nas mucosas.*
- **Lesões oculares graves/irritação ocular**  
*Forte efeito corrosivo.*  
*Forte efeito irritante com perigo de lesões oculares graves.*
- **Sensibilização respiratória ou cutânea**  
*É possível sensibilização através da inalação.*  
*É possível sensibilização através do contacto com a pele.*
- **Avisos adicionais de toxicologia:**  
*O produto apresenta os seguintes perigos com base no método de cálculo utilizado na Directiva comunitária de classificação de preparações, nos termos da última versão em vigor.*  
*Tóxico*  
*Nocivo*  
*Corrosivo*  
*Irritante*  
*Em caso de ingestão surgem fortes efeitos corrosivos na boca e na garganta, existindo ainda o risco de perfuração do esófago e do estômago.*

## SECÇÃO 12: Informação ecológica

- **12.1 Toxicidade**
- **Toxicidade aquática:** *Não existe mais nenhuma informação relevante disponível.*
- **12.2 Persistência e degradabilidade** *Não existe mais nenhuma informação relevante disponível.*
- **12.3 Potencial de bioacumulação** *Não existe mais nenhuma informação relevante disponível.*
- **12.4 Mobilidade no solo** *Não existe mais nenhuma informação relevante disponível.*
- **Outras indicações ecológicas:**
- **Indicações gerais:**  
*Classe de perigo para a água 3 (D) (auto-classificação): muito perigoso para a água*  
*Não deixar chegar às águas subterrâneas, aos cursos de água nem à canalização, nem em pequenas quantidades.*  
*Substâncias concentradas, ou seja não neutralizadas, não podem chegar aos esgotos nem às águas.*

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- Perigo de poluição da água potável mesmo se forem derramadas quantidades muito pequenas no subsolo.
- **12.5 Resultados da avaliação PBT e mPmB**
  - **PBT:** Não aplicável.
  - **mPmB:** Não aplicável.
  - **12.6 Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 13: Considerações relativas à eliminação

- **13.1 Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.
- **Meio de limpeza recomendado:** Água, eventualmente com adição de produtos de limpeza

### SECÇÃO 14: Informações relativas ao transporte

- **14.1 N° UN**
- **ADR, IMDG, IATA** UN2922
- **14.2 Designação oficial de transporte da ONU**
- **ADR** 2922 LÍQUIDO CORROSIVO TÓXICO, N.S.A. (glutaral), PERIGOSO PARA O AMBIENTE
- **IMDG, IATA** CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)
- **14.3 Classes de perigo para efeitos de transporte**
- **ADR, IMDG**
- 
- **Classe** 8 Matérias corrosivas
- **Rótulo** 8(6.1)
- **IATA**
- 

- **Class** 8 Matérias corrosivas
- **Label** 8 (6.1)
- **14.4 Tipo de embalagem**
- **ADR, IMDG, IATA** II
- **14.5 Perigos para o ambiente:** O produto contém matérias perigosas para o ambiente: glutaral
- **Poluente das águas:** Não
- **14.6 Precauções especiais para o utilizador** Atenção: Matérias corrosivas
- **N° Kemler:** 88
- **N° EMS:** F-A,S-B

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· <b>Segregation groups</b>	Acids
· <b>14.7 Transporte a granel em conformidade com o anexo II da Convenção Marpol 73/78 e o Código IBC</b> Não aplicável.	
· <b>Transporte/outras informações:</b>	
· <b>ADR</b>	
· <b>Quantidades Limitadas (LQ)</b>	1L
· <b>Quantidades exceptuadas (EQ)</b>	Código: E2 Quantidade líquida máxima por embalagem interior: 30 ml Quantidade líquida máxima por embalagem exterior: 500 ml
· <b>Categoria de transporte</b>	2
· <b>Código de restrição em túneis</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN2922, LÍQUIDO CORROSIVO TÓXICO, N.S.A. (glutaral), PERIGOSO PARA O AMBIENTE, 8(6.1), II

### SECÇÃO 15: Informação sobre regulamentação

- **15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**
- **Diretiva 2012/18/UE**
- **Substâncias perigosas designadas - ANEXO I** Nenhum dos componentes se encontra listado.
- **15.2 Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.

### SECÇÃO 16: Outras informações

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

- **Abreviaturas e acrónimos:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

VOC: Volatile Organic Compounds (USA, EU)

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

# Ficha de datos de seguridad

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### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

#### · 1.1 Identificador del producto

· **Nombre comercial:** Glutaraldehyde 70% EM Grade

· **Número del artículo:** 16350, 16360, 16365

#### · 1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados

No existen más datos relevantes disponibles.

· **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

#### · 1.3 Datos del proveedor de la ficha de datos de seguridad

##### · **Fabricante/distribuidor:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

##### Aname

C/ Perez Galdos no. 2

28693 Quijorna

Madrid, Spain

Tel: +34.91.816.89.50

Fax: +34.91.816.85.94

email: ventas@aname.es

· **Área de información:** Product safety department

#### · 1.4 Teléfono de emergencia:

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SECCIÓN 2: Identificación de los peligros

#### · 2.1 Clasificación de la sustancia o de la mezcla

· **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS02 llama

Flam. Liq. 2      H225 Líquido y vapores muy inflamables.



GHS06 calavera y tibias cruzadas

Acute Tox. 3      H301 Tóxico en caso de ingestión.

Acute Tox. 3      H311 Tóxico en contacto con la piel.

Acute Tox. 3      H331 Tóxico en caso de inhalación.



GHS08 peligro para la salud

Resp. Sens. 1      H334 Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.

STOT SE 1      H370 Provoca daños en los órganos.

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GHS05 corrosión

Skin Corr. 1A H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

Eye Dam. 1 H318 Provoca lesiones oculares graves.



GHS09 medio ambiente

Aquatic Acute 1 H400 Muy tóxico para los organismos acuáticos.

Aquatic Chronic 2 H411 Tóxico para los organismos acuáticos, con efectos nocivos duraderos.



GHS07

Skin Sens. 1 H317 Puede provocar una reacción alérgica en la piel.

### · 2.2 Elementos de la etiqueta

#### · Etiquetado con arreglo al Reglamento (CE) n° 1272/2008

El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.

#### · Pictogramas de peligro



GHS02



GHS05



GHS06



GHS08



GHS09

#### · Palabra de advertencia Peligro

#### · Componentes peligrosos a indicar en el etiquetaje:

glutaral

#### · Indicaciones de peligro

H225 Líquido y vapores muy inflamables.

H301+H311+H331 Tóxico en caso de ingestión, contacto con la piel o inhalación.

H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

H334 Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.

H317 Puede provocar una reacción alérgica en la piel.

H370 Provoca daños en los órganos.

H400 Muy tóxico para los organismos acuáticos.

H411 Tóxico para los organismos acuáticos, con efectos nocivos duraderos.

#### · Consejos de prudencia

P301+P310 EN CASO DE INGESTIÓN: Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/ médico.

P303+P361+P353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitar inmediatamente todas las prendas contaminadas. Aclararse la piel con agua/ducharse.

P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.

P321 Se necesita un tratamiento específico (ver en esta etiqueta).

P405 Guardar bajo llave.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/ internacional.

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- **2.3 Otros peligros**
- **Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.

### SECCIÓN 3: Composición/información sobre los componentes

- **3.2 Caracterización química: Mezclas**
- **Descripción:** Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.
- **Componentes peligrosos:** suprimido
- **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

### SECCIÓN 4: Primeros auxilios

- **4.1 Descripción de los primeros auxilios**
- **Instrucciones generales:**  
Quitarse de inmediato toda prenda contaminada con el producto.  
Antes de quitarse la protección respiratoria, quítese la ropa contaminada.  
En caso de respiración irregular o apnea (paro respiratorio), hágase la respiración artificial.
- **En caso de inhalación del producto:**  
Suministrar aire fresco u oxígeno; solicitar ayuda médica.  
Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.
- **En caso de contacto con la piel:** Lavar inmediatamente con agua y jabón y enjuagar bien.
- **En caso de con los ojos:**  
Limpiar los ojos abiertos durante varios minutos con agua corriente y consultar un médico.
- **En caso de ingestión:**  
No provocar el vómito y solicitar asistencia médica inmediata.  
Beber mucha agua a respirar aire fresco. Solicitar asistencia médica inmediatamente.
- **4.2 Principales síntomas y efectos, agudos y retardados** No existen más datos relevantes disponibles.
- **4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente**  
No existen más datos relevantes disponibles.

### SECCIÓN 5: Medidas de lucha contra incendios

- **5.1 Medios de extinción**
- **Sustancias extintoras apropiadas:**  
CO<sub>2</sub>, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.
- **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.
- **5.3 Recomendaciones para el personal de lucha contra incendios**
- **Equipo especial de protección:** Colocarse la protección respiratoria.

### SECCIÓN 6: Medidas en caso de vertido accidental

- **6.1 Precauciones personales, equipo de protección y procedimientos de emergencia**  
Llevar puesto equipo de protección. Mantener alejadas las personas sin protección.
- **6.2 Precauciones relativas al medio ambiente:**  
Diluir con mucha agua.  
Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.

( se continua en página 4 )

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- **6.3 Métodos y material de contención y de limpieza:**  
 Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).  
 Utilizar un neutralizador.  
 Desechar el material contaminado como vertido según item 13.  
 Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**  
 Ver capítulo 7 para mayor información sobre una manipulación segura.  
 Ver capítulo 8 para mayor información sobre el equipo personal de protección.  
 Para mayor información sobre cómo desechar el producto, ver capítulo 13.

### SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura**  
 Asegurar suficiente ventilación /aspiración en el puesto de trabajo.  
 Abrir y manejar el recipiente con cuidado.  
 Evitar la formación de aerosoles.
- **Prevención de incendios y explosiones:** Tener preparados los aparatos respiratorios.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
 Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

### SECCIÓN 8: Controles de exposición/protección individual

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
 Sin datos adicionales, ver punto 7.
- **8.1 Parámetros de control**
- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**  
 El producto no contiene cantidades relevantes de sustancias con valores límite que exijan un control en el puesto de trabajo.
- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.
- **8.2 Controles de la exposición**
- **Equipo de protección individual:**
- **Medidas generales de protección e higiene:**  
 Mantener alejado de alimentos, bebidas y alimentos para animales.  
 Quitarse de inmediato la ropa ensuciada o impregnada.  
 Lavarse las manos antes de las pausas y al final del trabajo.  
 Guardar la ropa protectora por separado.  
 Evitar el contacto con los ojos.  
 Evitar el contacto con los ojos y la piel.
- **Protección respiratoria:**  
 Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.

( se continua en página 5 )

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### · Protección de manos:



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

### · Material de los guantes

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.

### · Tiempo de penetración del material de los guantes

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

### · Protección de ojos:



Gafas de protección herméticas

## SECCIÓN 9: Propiedades físicas y químicas

### · 9.1 Información sobre propiedades físicas y químicas básicas

#### · Datos generales

#### · Aspecto:

Forma:	Líquido
Color:	Claro
Olor:	Característico
Umbral olfativo:	No determinado.

· valor pH: No determinado.

#### · Cambio de estado

Punto de fusión /campo de fusión:	Indeterminado.
Punto de ebullición /campo de ebullición:	101 °C

· Punto de inflamación: No aplicable.

· Inflamabilidad (sólido, gaseiforme): No aplicable.

#### · Temperatura de ignición:

Temperatura de descomposición: No determinado.

· Autoinflamabilidad: El producto no es autoinflamable.

· Peligro de explosión: No determinado.

#### · Límites de explosión:

Inferior:	No determinado.
Superior:	No determinado.

· Presión de vapor: No determinado.

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· <b>Densidad a 20 °C:</b>	1,143 g/cm <sup>3</sup>
· <b>Densidad relativa</b>	No determinado.
· <b>Densidad de vapor</b>	No determinado.
· <b>Velocidad de evaporación</b>	No determinado.
· <b>Solubilidad en / miscibilidad con agua:</b>	Completamente mezclable.
· <b>Coeficiente de reparto (n-octanol/agua):</b>	No determinado.
· <b>Viscosidad:</b>	
<b>Dinámica:</b>	No determinado.
<b>Cinemática:</b>	No determinado.
· <b>Concentración del disolvente:</b>	
<b>Disolventes orgánicos:</b>	0,0 %
<b>VOC (CE)</b>	0,00 %
· <b>9.2 Información adicional</b>	No existen más datos relevantes disponibles.

### SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad**
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **10.3 Posibilidad de reacciones peligrosas:** No se conocen reacciones peligrosas.
- **10.4 Condiciones que deben evitarse:** No existen más datos relevantes disponibles.
- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas:** Fuerte efecto cáustico en la piel y las mucosas.
- **Lesiones o irritación ocular graves:**  
Fuerte efecto cáustico  
Produce irritaciones fuertes con el riesgo de perjudicar seriamente los ojos.
- **Sensibilización respiratoria o cutánea:**  
Posible sensibilización al aspirarse.  
Posible sensibilización al entrar en contacto con la piel.
- **Indicaciones toxicológicas adicionales:**  
En conformidad con el procedimiento de cálculo contenido en la última versión de la Normativa General de Clasificación de la CE para Preparados, el producto tiene los siguientes riesgos:  
Tóxico  
Nocivo  
Corrosivo  
Irritante  
La ingestión produce un fuerte efecto cáustico en la boca y la faringe, así como el peligro de perforación del esófago y del estómago.

ES

( se continua en página 7 )



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### SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.
- **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.
- **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
 Nivel de riesgo para el agua 3 (autoclasiicación): muy peligroso para el agua  
 No dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados, ni siquiera en pequeñas cantidades.  
 En estado no diluido o no neutralizado, no verter en el alcantarillado o en otros sistemas de desagüe.  
 Una cantidad ínfima vertida en el subsuelo ya representa un peligro para el agua potable.
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

### SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.
- **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

### SECCIÓN 14: Información relativa al transporte

- |  |  |
|--|--|
| · <b>14.1 Número UN</b>  |  |
| · <b>ADR, IMDG, IATA</b>   | UN2922   |
| · <b>14.2 Designación oficial de transporte de las Naciones Unidas</b> |  |
| · <b>ADR</b>   | 2922 LÍQUIDO CORROSIVO, TÓXICO, N.E.P. (glutaral),<br>PELIGROSO PARA EL MEDIO AMBIENTE |
| · <b>IMDG, IATA</b>  | CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)                                       |
| · <b>14.3 Clase(s) de peligro para el transporte</b>                   |  |
| · <b>ADR, IMDG</b>   |  |
|  |     |
| · <b>Clase</b>   | 8 Materias corrosivas  |
| · <b>Etiqueta</b>  | 8(6.1)   |

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## · IATA



· *Class* 8 *Materias corrosivas*  
 · *Label* 8 (6.1)

· *14.4 Grupo de embalaje*  
 · *ADR, IMDG, IATA* II

· *14.5 Peligros para el medio ambiente:* *El producto contiene materias peligrosas para el medio ambiente: glutaral*  
 · *Contaminante marino:* *No*

· *14.6 Precauciones particulares para los usuarios* *Atención: Materias corrosivas*  
 · *Número Kemler:* 88  
 · *Número EMS:* F-A,S-B  
 · *Segregation groups* *Acids*

· *14.7 Transporte a granel con arreglo al anexo II del Convenio Marpol 73/78 y del Código IBC* *No aplicable.*

· *Transporte/datos adicionales:*

· *ADR*  
 · *Cantidades limitadas (LQ)* *1L*  
 · *Cantidades exceptuadas (EQ)* *Código: E2*  
*Cantidad neta máxima por envase interior: 30 ml*  
*Cantidad neta máxima por embalaje exterior: 500 ml*  
 · *Categoría de transporte* *2*  
 · *Código de restricción del túnel* *E*

· *IMDG*  
 · *Limited quantities (LQ)* *1L*  
 · *Excepted quantities (EQ)* *Code: E2*  
*Maximum net quantity per inner packaging: 30 ml*  
*Maximum net quantity per outer packaging: 500 ml*

· *"Reglamentación Modelo" de la UNECE:* *UN2922, LÍQUIDO CORROSIVO, TÓXICO, N.E.P. (glutaral), PELIGROSO PARA EL MEDIO AMBIENTE, 8(6.1), II*

## SECCIÓN 15: Información reglamentaria

- *15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla*
- *Directiva 2012/18/UE*
- *Sustancias peligrosas nominadas - ANEXO I ninguno de los componentes está incluido en una lista*
- *15.2 Evaluación de la seguridad química: Una evaluación de la seguridad química no se ha llevado a cabo.*

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# Ficha de datos de seguridad

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### SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

· **Abreviaturas y acrónimos:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

VOC: Volatile Organic Compounds (USA, EU)

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### 1: การระบุสาร/ การทำ/ และของบริษัท / บริษัทที่เข้าถือครอง

- 1.1 ลักษณะเฉพาะของผลิตภัณฑ์
- ชื่อทางการค้า **Glutaraldehyde 70% EM Grade**
- เลขที่รายชื่อ 16350, 16360, 16365
- 1.2 สารหรือสารผสมที่เกี่ยวข้องที่ระบุให้ใช้และไม่ควรรให้ใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- การประยุกต์ใช้สาร/ การทำ เคมีภัณฑ์ห้องทดลอง
- 1.3 รายละเอียดของผู้จัดหาข้อมูลด้านความปลอดภัย
- ผู้ผลิต/ ผู้จัดหา  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ข้อมูลรายละเอียดเพิ่มเติมหาได้จาก Product safety department
- 1.4 หมายเลขโทรศัพท์ฉุกเฉิน:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2: การระบุสิ่งที่เป็นอันตราย

- 2.1 การจำแนกประเภทของสารหรือสารผสม
- การแบ่งประเภทตามข้อบังคับ (จีซี) เลขที่ 1272/2008



เปลวไฟ

Flam. Liq. 2      H225 ของเหลวและไอที่ไวไฟสูง



หัวกระโหลกและกระดูกไขว้

Acute Tox. 3      H301 มีพิษหากกลืนเข้าไป  
Acute Tox. 3      H311 มีพิษโดยการสัมผัสกับผิวหนัง  
Acute Tox. 3      H331 มีพิษหากสูดหายใจเข้า



สิ่งอันตรายต่อสุขภาพ

Resp. Sens. 1      H334 อาจเป็นสาเหตุให้เกิดการแพ้หรืออาการโรคหืดหรือหายใจลำบากหากสูดหายใจเข้า  
STOT SE 1      H370 เป็นสาเหตุทำให้อวัยวะเสียหาย



การกัดกร่อน

Eye Dam. 1      H314 เป็นสาเหตุให้ผิวหนังไหม้อย่างสาหัสและทำอันตรายต่อดวงตา  
H318 เป็นสาเหตุให้เกิดอันตรายต่อดวงตาอย่างสาหัส



สิ่งแวดล้อม

Aquatic Acute 1      H400 มีพิษมากต่อสิ่งมีชีวิตในน้ำ  
Aquatic Chronic 2      H411 มีพิษต่อสิ่งมีชีวิตในน้ำพร้อมผลกระทบระยะยาว

(ต่อที่หน้า 2)

# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### ชื่อทางการค้า Glutaraldehyde 70% EM Grade

(ต่อหน้า 1)



Skin Sens. 1 H317 อาจเป็นสาเหตุให้ผิวหนังแสดงอาการแพ้

- 2.2 องค์ประกอบของฉลาก
- ฉลากตามระเบียบ (EC) เลขที่ 1272/2008 ผลิตภัณฑ์ได้รับการจัดประเภทและติดฉลากตามข้อบังคับของ CLP
- ภาพสัญลักษณ์ที่เป็นอันตราย



GHS02 GHS05 GHS06 GHS08 GHS09

- สัญญาณคำ อันตราย
- ส่วนประกอบที่ระบุอันตรายบนฉลาก  
Glutaraldehyde
- ประกาศสิ่งที่เป็นอันตราย
  - H225 ของเหลวและไอที่ไวไฟสูง
  - H301+H311+H331 เป็นพิษหากมีการกลืนกิน , มีการสัมผัสกับผิวหนัง หรือ หากมีการสูดดม.
  - H314 เป็นสาเหตุให้ผิวหนังไหม้อย่างสาหัสและทำอันตรายต่อดวงตา
  - H334 อาจเป็นสาเหตุให้เกิดการแพ้หรืออาการ โรคหืดหรือหายใจลำบากหากสูดหายใจเข้าไป
  - H317 อาจเป็นสาเหตุให้ผิวหนังแสดงอาการแพ้
  - H370 เป็นสาเหตุทำให้อวัยวะเสียหาย
  - H400 มีพิษมากต่อสิ่งมีชีวิตในน้ำ
  - H411 มีพิษต่อสิ่งมีชีวิตในน้ำพร้อมผลกระทบระยะยาว
- ประกาศการป้องกันระดับความเสี่ยง
  - P301+P310 หากกลืนลงไป: โทรศัพท์ถึงศูนย์พิษวิทยา/แพทย์ ทันที
  - P303+P361+P353 หากสัมผัสสูกผิวหนัง (หรือเส้นผม) ถอดเสื้อผ้าที่เปื้อนทั้งหมดทันที ล้างผิวด้วยน้ำ/อาบน้ำ
  - P305+P351+P338 หากเข้าตา : ชะด้วยน้ำอย่างระมัดระวังเป็นเวลาหลายๆนาทีถอดคอนแทกซ์เลนส์ถ้ายังอยู่ที่ตมและสะดวกที่จะทำก็ให้ชะล้างต่อไป
  - P321 การบำบัดรักษาเฉพาะ (ดูฉลาก)
  - P405 เก็บในที่ใส่กุญแจมิด
  - P501 ทิ้งสิ่งที่บรรจุ/ภาชนะที่บรรจุตามกฎหมายของท้องถิ่น/แคว้น/ในประเทศ/ระหว่างประเทศ
- 2.3 อันตรายอื่นๆ
- ผลของ PBT และการประเมิน vPvB
- PBT: ไม่สามารถใช้ได้
- vPvB: ไม่สามารถใช้ได้

### 3: ส่วนประกอบ/ ข้อมูลรายละเอียดของส่วนผสมต่างๆ

- 3.2 คุณลักษณะทางเคมี: ส่วนผสม
- คำอธิบาย ส่วนผสมของสารในรายการข้างล่างพร้อมสารเติมแต่งที่ไม่เป็นอันตราย
- ส่วนประกอบที่มีอันตราย ยกเลิก
- ข้อมูลรายละเอียดเสริม สำหรับข้อความที่ระบุในรายการวลีความเสี่ยงที่อ้างอิงถึงในส่วนที่ 16

### 4: มาตรการการปฐมพยาบาลเบื้องต้น

- 4.1 คำอธิบายถึงมาตรการปฐมพยาบาล
- ข้อมูลรายละเอียดทั่วไป  
ให้ถอดเสื้อผ้าที่เปื้อนออกทันที

(ต่อหน้า 3)

# แผนข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### ชื่อทางการค้า Glutaraldehyde 70% EM Grade

(ต่อที่หน้า 2)

ให้ถอดอุปกรณ์ช่วยหายใจออกหลังจากที่ถอดเสื้อผ้าที่เปื้อนออกเรียบร้อยแล้วเท่านั้น  
ในกรณีที่หายใจผิดปกติหรือการหายใจหยุดชะงักให้ใช้อุปกรณ์ช่วยหายใจ

#### · หลังจากการสูดหายใจเข้าไป

หาบริเวณที่มีอากาศบริสุทธิ์หรือให้ออกซิเจนติดต่อแพทย์  
ในกรณีที่คนใช้ไม่รู้สึกตัวให้ขนย้ายคนใช้อย่างมั่นคงในท่าตะแคงด้านข้าง

#### · หลังจากการสัมผัสผิวหนัง

ล้างด้วยน้ำและสบู่แล้วฟอกให้ทั่วทันที

#### · หลังจากการสัมผัสดวงตา

ชะตาที่เปิดอยู่ใต้น้ำที่กำลังไหลเป็นเวลาหลายนาที่จากนั้นให้ปรึกษาแพทย์

#### · หลังจากการกลืนเข้าไป:

อย่าพยายามทำให้อาเจียรขอความช่วยเหลือทางการแพทย์ทันที

ดื่มน้ำมากๆและให้สูดอากาศบริสุทธิ์พบแพทย์โดยทันที

#### · 4.2 อาการสำคัญส่วนใหญ่และผลกระทบ ทั้งชนิดเฉียบพลันและค่อยๆ แสดงอาการ

ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

#### · 4.3 ข้อป้องกันของอาการที่ต้องเข้ารับการรักษามาจากแพทย์ทันทีและการบำบัดพิเศษที่จำเป็น

ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 5: มาตรการการดับเพลิง

#### · 5.1 สารที่ใช้ดับเพลิง

#### · สารดับเพลิงที่เหมาะสม

คาร์บอนไดออกไซด์สเปรย์ผงหรือน้ำดับเพลิงขนาดใหญ่ด้วยการฉีดน้ำหรือโฟมแอลกอฮอล์ที่ทนทาน

#### · 5.2 อันตรายเฉพาะอย่างที่เกิดจากสารหรือส่วนผสม

ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

#### · 5.3 คำแนะนำสำหรับพนักงานดับเพลิง

#### · อุปกรณ์ป้องกันภัย อุปกรณ์ป้องกันซึ่งเหมาะสำหรับการหายใจทางปาก

### 6: มาตรการลดอุบัติเหตุ

#### · 6.1 การป้องกันส่วนบุคคล อุปกรณ์ป้องกัน และขั้นตอนดำเนินการเมื่อเกิดกรณีฉุกเฉิน

สวมอุปกรณ์ป้องกันภัยกันคนที่ไม่ใช้อุปกรณ์ป้องกันออกไป

#### · 6.2 การให้ความคุ้มครองสิ่งแวดล้อมล่วงหน้า:

ทำให้เจือจางด้วยน้ำมากๆ

อย่าปล่อยให้เข้าไปในท่อน้ำทิ้ง/ น้ำบนดินหรือใต้ดิน

#### · 6.3 วิธีดำเนินการและวัสดุสำหรับการบรรจุและการทำความสะอาด:

ดูดซับด้วยวัสดุที่สามารถยึดของเหลวไว้ ( ทรายสะอาด โขดไม้ที่ตัดยัดเกาะกรดตัวยัดทั่วๆไปซีล  
ลือย)

ใช้สารทำให้เป็นกลาง

ทิ้งวัสดุที่ปนเปื้อนเป็นของเสียตามรายการในบัญชี 13

ตรวจให้แน่ใจว่ามีการระบายอากาศที่ดีพอ

#### · 6.4 การอ้างอิงถึงส่วนอื่น

ดูข้อมูลรายละเอียดเรื่องความปลอดภัยในการขนถ่ายจากส่วนที่ 7

ดูข้อมูลรายละเอียดเรื่องอุปกรณ์ป้องกันส่วนบุคคลจากส่วนที่ 8

ดูข้อมูลรายละเอียดเรื่องการจัดเก็บจากส่วนที่ 13

### 7: การขนถ่ายและการจัดเก็บ

#### · 7.1 การป้องกันล่วงหน้าสำหรับการจัดการด้านความปลอดภัย

ทำให้แน่ใจว่าสถานที่ทำงานมีการระบายอากาศ/ ไอเสียที่ดี

เปิดและถือภาชนะรองรับอย่างระมัดระวัง

ป้องกันการเกิดละอองสารฟุ้ง

#### · ข้อมูลรายละเอียดเกี่ยวกับการป้องกันอัคคีภัยและการระเบิด

เก็บอุปกรณ์ป้องกันสำหรับการช่วยหายใจให้มีพร้อมใช้งาน

(ต่อที่หน้า 4)

-TH

# แผนข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### ชื่อทางการค้า Glutaraldehyde 70% EM Grade

(ต่อที่หน้า 3)

- 7.2 เงื่อนไขในการเก็บรักษาอย่างปลอดภัย, รวมถึงสิ่งที่เข้ากันไม่ได้ใดๆ
- การจัดเก็บ
- ข้อกำหนดที่ต้องปฏิบัติตามสำหรับห้องเก็บและภาชนะบรรจุ ไม่มีข้อกำหนดพิเศษ
- ข้อมูลรายละเอียดด้านการจัดเก็บในสถานที่จัดเก็บรวม ไม่ได้กำหนด
- ข้อมูลรายละเอียดเพิ่มเติมด้านสภาพการจัดเก็บ เก็บโดยปิดผนึกอย่างแน่นหนา
- 7.3 การระบุถึงการสิ้นสุดการใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 8: การควบคุมการทิ้งในลักษณะเปิด / การป้องกันภัยส่วนบุคคล

- ข้อมูลรายละเอียดเสริมสำหรับการออกแบบสิ่งอำนวยความสะดวกทางเทคนิค ไม่มีข้อมูลนอกเหนือจากนี้ดูรายการ 7
- 8.1 การควบคุมตัวแปร
- ส่วนผสมพร้อมค่าขอบเขตที่ต้องเฝ้าดูในสถานที่ปฏิบัติงาน  
ผลิตภัณฑ์ที่ไม่มีปริมาณวัสดุใดๆมากพอจนถึงค่าวิกฤติที่จะต้องมีการติดตามในสถานที่ทำงาน
- ข้อมูลรายละเอียดเสริม รายการถูกต้องระหว่างที่จัดทำโดยอาศัยการใช้งานเป็นหลัก
- 8.2 การควบคุมการสัมผัส
- อุปกรณ์ป้องกันภัยส่วนบุคคล
- มาตรการการป้องกันและสุขอนามัยทั่วไป  
เก็บให้ห่างจากสิ่งของที่เป็นอาหารเครื่องดื่มและอาหารสัตว์  
ให้ถอดเสื้อผ้าที่เปื้อนและเช็ดออกทันที  
ล้างมือก่อนที่จะหยุดพักและเมื่อสิ้นสุดเวลาทำงาน  
เก็บชุดป้องกันแยกต่างหาก  
หลีกเลี่ยงการสัมผัสลูกตา  
หลีกเลี่ยงการสัมผัสลูกตาและผิวหนัง
- การป้องกันการสูดหายใจเข้าไป  
ในกรณีที่อยู่เป็นเวลาสั้นหรืออากาศเป็นพิษระดับต่ำใช้หน้ากากกรองเพื่อช่วยหายใจในกรณีที่มีความเข้มข้นสูงหรืออยู่เป็นเวลานาน ให้ใช้เครื่องป้องกันที่มีอุปกรณ์ช่วยหายใจในตัว
- การป้องกันมือ



ถุงมือป้องกัน

วัสดุของถุงมือจะต้องไม่ให้อากาศผ่านเข้าออกและทนทานต่อผลิตภัณฑ์/ สาร/ การผลิต เนื่องจากขาดการทดสอบจึงไม่มีคำแนะนำสำหรับวัสดุที่ใช้ทำถุงมือสำหรับผลิตภัณฑ์ / การผลิต / ของผสมเคมี

เลือกวัสดุสำหรับถุงมือโดยพิจารณาจากเวลาที่ใช้ในการซึมผ่านอัตราการแพร่และการเสื่อม

#### · วัสดุที่ใช้ทำถุงมือ

การเลือกใช้ถุงมือที่เหมาะสมไม่เพียงแต่ขึ้นอยู่กับวัสดุแต่ยังขึ้นกับมาตรฐานด้านคุณภาพและข้อแตกต่างระหว่างผู้ผลิตแต่ละแห่งโดยที่ผลิตภัณฑ์เตรียมมาจากสารหลายชนิดความทนทานของวัสดุถุงมือไม่สามารถที่จะคำนวณล่วงหน้าดังนั้นจึงต้องตรวจสอบกับการใช้งาน

#### · เวลาที่ใช้ในการทะลุผ่านวัสดุที่ใช้ทำถุงมือ

ผู้ผลิตถุงมือป้องกันจะต้องทดสอบหาเวลาแน่นอนที่ใช้ในการทะลุผ่านและจะต้องมีการตรวจสอบติดตาม

(ต่อที่หน้า 5)

TH

# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### ชื่อทางการค้า Glutaraldehyde 70% EM Grade

(ต่อหน้า 4)

#### · การป้องกันตา



แว่นตาที่ขอบปิดสนิท

### 9: คุณสมบัติทางกายภาพและเคมี

#### · 9.1 ข้อมูลคุณสมบัติพื้นฐานทางกายภาพและเคมี

##### · ข้อมูลรายละเอียดทั่วไป

##### · ลักษณะ :

รูปสีฐาน  
สีของเหลว  
ใส

##### · กลิ่น

ลักษณะพิเศษ

##### · เกณฑ์กลิ่น :

ไม่ได้กำหนดไว้.

##### · ค่า pH

ไม่ได้กำหนดไว้.

##### · การเปลี่ยนแปลงสถานะ

จุดหลอมเหลว/ ขอบเขตการหลอมละลาย  
จุดเดือด/ ขอบเขตการเดือดไม่ได้กำหนด  
101 °C

##### · จุดวาบไฟ

ไม่สามารถใช้ได้

##### · ความสามารถติดไฟ (ของแข็งแกส)

ไม่สามารถใช้ได้

##### · อุณหภูมิจุดระเบิด

อุณหภูมิละลายตัว

ไม่ได้กำหนดไว้.

##### · การเผาไหม้ด้วยตัวเอง

ผลิตภัณฑ์ไม่เป็นสารจุดไฟติดด้วยตัวเอง

##### · อันตรายจากการระเบิด

ไม่ได้กำหนดไว้.

##### · ขอบเขตการระเบิด

ขั้นต่ำ  
ขั้นสูง

ไม่ได้กำหนดไว้.

ไม่ได้กำหนดไว้.

##### · ความดันไอ

ไม่ได้กำหนดไว้.

##### · ความหนาแน่น ที่ 20 °C

1.143 g/cm<sup>3</sup>

##### · ความหนาแน่นสัมพัทธ์

ไม่ได้กำหนดไว้.

##### · ความหนาแน่นของไอ

ไม่ได้กำหนดไว้.

##### · อัตราการระเหย

ไม่ได้กำหนดไว้.

##### · ความสามารถในการละลายใน / ความสามารถผสมเป็นสารละลายเนื้อเดียวทุกส่วนผสมกับน้ำ

ผสมกันได้อย่างเต็มที่

##### · สัมประสิทธิ์การแยกตัว (เอ็น-ออกทานอล/น้ำ)

ไม่ได้กำหนดไว้.

##### · ความหนืด

(ไดนามิค) พลศาสตร์

ไม่ได้กำหนดไว้.

(คิเนเมติก) จลนศาสตร์

ไม่ได้กำหนดไว้.

##### · ปริมาณส่วนประกอบตัวทำละลาย

ตัวทำละลายอินทรีย์

0.0 %

VOC (EC)

0.00 %

(ต่อหน้า 6)



# แผนข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### ชื่อทางการค้า Glutaraldehyde 70% EM Grade

(ต่อที่หน้า 5)

#### 9.2 ข้อมูลอื่นๆ

ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 10: ความเสถียรและความสามารถในการทำปฏิกิริยา

- 10.1 ปฏิกิริยาโต้ตอบ
- 10.2 เสถียรภาพทางเคมี
- การสลายตัวด้วยความร้อน / เงื่อนไขที่ต้องหลีกเลี่ยง ไม่มีการสลายตัวถ้าใช้ตามรายละเอียดที่ระบุไว้
- 10.3 ความเป็นไปได้ของการเกิดปฏิกิริยาอันตราย ไม่มีปฏิกิริยาเป็นอันตรายที่รู้จัก
- 10.4 เงื่อนไขเพื่อการหลีกเลี่ยง ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.5 วัสดุที่เข้ากันไม่ได้: ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.6 อันตรายจากการสลายตัวของผลิตภัณฑ์: ไม่มีสารจากการสลายตัวที่เป็นอันตรายที่รู้จัก

### 11: ข้อมูลรายละเอียดเกี่ยวกับพิษวิทยา

- 11.1 ข้อมูลเกี่ยวกับผลกระทบทางพิษวิทยา
- ความเป็นพิษอย่างสูดดม:
  - อาการระคายเคืองเบื้องต้น
  - บนผิวหนัง
    - ผลกระทบของตัวอย่างแรงต่อผิวหนังและเยื่อผิวหนังในช่องจมูกและปากที่สร้างน้ำเมือกห่อหุ้ม
    - สูดสูด
  - ที่ดวงตา
    - ต่างกัตัวอย่างรุนแรง
    - ระคายเคืองอย่างมากพร้อมกับอันตรายสาหัสจากการบาดเจ็บที่ดวงตา
  - การทำให้แพ้
    - อาจจะทำให้แพ้โดยการสูดหายใจ
    - อาจจะทำให้แพ้โดยการสัมผัสกับผิวหนัง
- ข้อมูลรายละเอียดเสริมเกี่ยวกับพิษวิทยา
  - ผลิตภัณฑ์จะระบุถึงอันตรายต่างๆตามวิธีการที่กำหนดไว้ในต้นแบบการจัดแบ่งประเภททั่วไปสำหรับการผลิตของ EU ที่ออกฉบับล่าสุด
  - มีพิษ
  - เป็นอันตราย
  - กัด
  - ทำให้ระคายเคือง
  - การกลืนเข้าไปจะทำให้ปากและลำคอได้รับฤทธิ์ตัวอย่างรุนแรงและเป็นอันตรายต่อหลอดอาหารและกระเพาะเป็นแผลทะลุ

### 12: ข้อมูลรายละเอียดเกี่ยวกับนิเวศวิทยา

- 12.1 ความเป็นพิษ
- ความเป็นพิษที่เกี่ยวกับน้ำ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.2 การคงอยู่และการย่อยสลาย ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.3 การสะสมทางชีวภาพที่อาจเกิดขึ้น ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.4 การเปลี่ยนแปลงในดิน ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- ข้อมูลรายละเอียดเสริมเกี่ยวกับนิเวศวิทยา
- หมายเหตุทั่วไป
  - เป็นอันตรายต่อน้ำชั้น 3 ( กฎข้อบังคับของเยอรมัน ) ( การประเมินค่าด้วยตัวเอง ) : เป็นอันตรายสูงสุดกับน้ำ
  - อย่าปล่อยให้ผลิตภัณฑ์ไปถึงน้ำผิวดินเส้นทางน้ำหรือระบบระบายน้ำเสียแม้ว่าจะเป็นปริมาณเล็กน้อยเท่านั้น

(ต่อที่หน้า 7)

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# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### ชื่อทางการค้า Glutaraldehyde 70% EM Grade

(ต่อหน้า 6)

ผลิตภัณฑ์ที่ยังไม่ได้เจือจางหรือยังไม่ได้ทำให้เป็นกลางต้องไม่ไปถึงน้ำเสียหรือระบายน้ำ




เป็นอันตรายต่อน้ำดื่มแม้จะร่วงลงในพื้นที่เป็นปริมาณที่น้อยมากก็ตาม

- 12.5 ผลของ PBT และการประเมิน vPvB
- PBT: ไม่สามารถใช้ได้
- vPvB: ไม่สามารถใช้ได้
- 12.6 ผลข้างเคียงอื่นๆ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 13: การพิจารณาการกำจัด

- 13.1 วิธีการกำจัดของเสีย
- คำแนะนำ ต้องไม่ทิ้งไปพร้อมกับขยะจากบ้านเรือนอย่าปล่อยให้ผลิตภัณฑ์เข้าถึงระบบระบายน้ำเสีย
- ภาชนะบรรจุที่ยังไม่ได้ล้างทำความสะอาด
- คำแนะนำ การกำจัดจะต้องทำตามกฎระเบียบที่เป็นทางการ
- สารทำความสะอาดที่แนะนำ น้ำถ้าจำเป็นใช้คู่กับสารทำความสะอาด

### 14: ข้อมูลรายละเอียดในการขนส่ง

· 14.1 เลขที่ UN	
· ADR, IMDG, IATA	UN2922
· 14.2 ชื่อการจัดส่งสินค้าที่เหมาะสมของ UN	
· ADR	2922 CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS
· IMDG, IATA	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde)
· 14.3 ชั้นเรียนอันตรายจากการขนส่ง	
· ADR, IMDG	
	
· ประเภท	8 สารกัดกร่อน
· ฉลากสิ่งที่เป็นอันตราย	8(6.1)
· IATA	
 	
· Class	8 สารกัดกร่อน
· Label	8 (6.1)
· 14.4 กลุ่มของภาชนะบรรจุ	
· ADR, IMDG, IATA	II
· 14.5 สิ่งที่เป็นอันตรายต่อสภาพแวดล้อม	ผลิตภัณฑ์ประกอบด้วยวัสดุที่เป็นอันตรายต่อสภาพแวดล้อม : Glutaraldehyde
· สารที่เป็นพิษต่อทะเล	ไม่ใช่
· 14.6 การป้องกันพิเศษล่วงหน้าสำหรับผู้ใช้	คำเตือน !: สารกัดกร่อน
· รหัสความอันตราย:	88

(ต่อหน้า 8)

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# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.09.28

การปรับปรุงใหม่ : 2015.09.28

### ชื่อทางการค้า Glutaraldehyde 70% EM Grade

(ต่อหน้า 7)

· หมายเลข EMS	F-A,S-B
· Segregation groups	Acids
· 14.7 การขนส่งขนาดใหญ่ตามภาคผนวก 2 ของ MARPOL73/78 และรหัส IBC	ไม่สามารถใช้ได้
· การขนส่ง/ข้อมูลรายละเอียดเสริม	
· ADR	
· ปริมาณที่จำกัด (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· หมวดหมู่การขนส่ง	2
· รหัสควบคุมการผ่านอุโมงค์	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· “กฎระเบียบต้นแบบ” ของ UN	UN2922, CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde), ENVIRONMENTALLY HAZARDOUS, 8(6.1), II

### 15: ข้อมูลรายละเอียดของกฎระเบียบ

- 15.1 ความปลอดภัย สุขภาพและระเบียบ/กฎหมายสิ่งแวดล้อมโดยเฉพาะของสารหรือสารผสม  
ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 15.2 การประเมินความปลอดภัยของสารเคมี: ไม่ได้ดำเนินการตามการประเมินความปลอดภัยของสารเคมี

### 16: ข้อมูลรายละเอียดอื่นๆ

ข้อมูลรายละเอียดนี้ใช้ความรู้ปัจจุบันของเราเป็นหลักอย่างไรก็ตามข้อมูลนี้ไม่ใช่การรับประกันจากสถาบันต่อคุณสมบัติเฉพาะของผลิตภัณฑ์และไม่สามารถยืนยันการบังคับใช้ตามกฎหมายที่เกี่ยวข้องกับสัญญา

#### · คำย่อและชื่อย่อที่ผสมขึ้น

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

VOC: Volatile Organic Compounds (USA, EU)

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

: Skin corrosion/irritation, Hazard Category 1

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2