

RUBRIQUE 1: Identification

1.1 Identification

Product Name: **Glutaraldéhyde 50% EM GRADE**

Product Code: GT135074

1.2 Relevant identified uses of substance or mixture and not recommended uses

Identified uses: Laboratory chemicals,

1.3 Information about the security data sheet provider

Company: em-grade.com distributed by Delta
Microscopies

22bis, Saint-Ybars Road
31190 MAURESSAC - FRANCE

Phone: (33) 05 61 73 60 14

Fax: (33) 05 61 80 78 53

Email address: info@em-grade.com

1.4 Emergency call number

Emergency Call Number in France: 01 45 42 59 59 (ORFILA)

RUBRIQUE 2: Identification of hazards

2.1 Classification of substance or mixture:

		GHS06 <i>Skull and crossbones</i>
Acute Tox. Oral 3		H301 <i>Toxic if swallowed.</i>
Acute Toxicity - Inhalation 2		H330 <i>Fatal if inhaled.</i>
		GHS08 <i>Health hazard</i>
Resp. Sens. 1		H334 <i>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</i>
		GHS05 <i>Corrosion</i>
Skin Corr. 1B		H314 <i>Causes severe skin burns and eye damage.</i>
Eye Dam. 1		H318 <i>Causes serious eye damage.</i>
		GHS09
Aquatic Acute 1		H400 <i>Very toxic to aquatic life</i>
Aquatic Chronic 2		H411 <i>Toxic to aquatic life with long-lasting effects</i>



GHS07

Skin Sens. 1

H317 *May cause an allergic skin reaction.*

STOT SE 3

H335 *May cause respiratory irritation*

2.2 Labeling items:

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

Danger pictograms



GHS06 GHS08 GHS05 GHS09

Warning mention: *Danger*

Dangerous components for labelling: *Glutaraldehyde*

Danger mentions:

H301 *Toxic if swallowed*

H330 *Fatal 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.*

H335 *May cause respiratory irritation.*

H400 *Very toxic to aquatic life*

H411 *Toxic to aquatic life with long-lasting effects*

Cautionary tips:

P301+P310 *IF SWALLOWED: Immediately call a POISON CENTER/doctor/...*

P303+361+353 *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.*

P320 *Specific treatment is urgent (see ... on this label)*

P362+P364 *Take off contaminated clothing and wash it before reuse*

P405 *Keeping under lock and key*

P501 *Eliminate content/container in accordance with local/regional/national/international I regulations.*

2.3 Other dangers:

Results of PBT and vPvB evaluations: Not applicable

RUBRIQUE 3: Composition/component information

3.1 Substances:

not applicable

3.2 Mixture:

Mixture of the substances listed below with nonhazardous additions.

designation	CASE No.	Number EC	% mass
Glutaraldéhyde	111-30-8	203-856-5	>25% - ≤50%

RUBRIQUE 4: First aid

4.1 Description of first aid

General notes:

Immediately remove clothing contaminated with the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

If inhaled

Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation

In case of contact with the skin

Immediately wash with water and soap and rinse thoroughly.

In case of eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

If swallowed

Immediately call a doctor. Drink copious amounts of water and provide fresh air.

Immediately call a doctor.

4.2 Main symptoms and effects, acute and delayed

No other important information available.

4.3 Indications of any immediate medical care and special treatment required

No other important information available

RUBRIQUE 5: Firefighting measures

5.1 Ways to extinguish

Adapt fire suppression measures to the environment.

5.2 Specific hazards resulting from substance or mixture

No other important information available.

5.3 Advice to firefighters

Mouth respiratory protective device

RUBRIQUE 6: Measures in case of accidental dispersal

6.1 Individual precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Precautions for environmental protection

Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

6.3 Containment and cleaning methods and equipment

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Evacuate contaminated materials as waste in accordance with point 13. Ensure sufficient ventilation.

Reference to other topics

For information for safe handling, see Chapter 7. For information on personal protective equipment, see Chapter 8. For information on disposal, see Chapter 13.

PAC-1: 111-30-8 Glutaraldehyde 0.2 ppm ·

PAC-2: 111-30-8 Glutaraldehyde 1 ppm ·

PAC-3: 111-30-8 Glutaraldehyde 5 ppm

RUBRIQUE 7: Manipulation and storage

7.1 Precautions to Take 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.

7.2 Conditions for safe storage, including possible incompatibilities

No special requirements. Keep containers closed.

7.3 Special Final Use

Laboratory use

RUBRIQUE 8: Exposure controls/individual protection

8.1 Control Settings

Components with limit values that require monitoring at the workplace:	
111-30-8 Glutaraldehyde	
REL	Ceiling limit value: 0.8 mg/m ³ , 0.2 ppm See Pocket Guide App. C
TLV	Ceiling limit value: 0.2 mg/m ³ , 0.05 ppm DSEN;RSEN ;activated or inactivated, A4

8.2 Exposure control

General protection and hygiene measures

Keep away from food, beverages and pet food. Immediately remove soiled or moistened clothing. Wash your hands before breaks and at the end of work. Keep protective clothing separately. Avoid contact with the eyes. Avoid contact with the eyes



and skin.

Personal protective measures, such as personal protective equipment

Eye and face protection

Safety goggles with side protections

Skin protection

Long-sleeved clothing

Wear appropriate gloves. Consider the information given by the supplier regarding permeability and penetration times, and the specific conditions of the workplace (mechanical constraints, contact time).

Respiratory protection

If exposed to low or short duration, use a breathing filter; In case of intense or long-lasting exposure, use a breathing apparatus independent of ambient air.

Heat hazards

nothingness

Environmental protection measures

No information available

RUBRIQUE 9: Physical and chemical properties

9.1 Information on essential physical and chemical properties

Appearance:

Physical status: Liquid

Color: colorless

Smell: Characteristic

Olfactory threshold: data not available

pH: 3.1-4.5

Melting point: -18°C

Boiling point/interval: 100.7°C

Flashpoint: data not available

Flammability (solid, gas): the substance is not flammable

Self temperature-flammability: data not available

Explosive limit, higher: data not available

Explosive limit, lower: data not available

Density at 20°C: 1. g/cm³ (8.72887 lbs/gal)

Relative density: undetermined

Relative steam density: not applicable

Decomposition temperature: data not available

Hydrosolubility: Fully miscible.

Sharing coefficient: noctanol/water: data not available

Viscosity, dynamic: 2.5 mPas

Viscosity, cinematic: not determined

Solvent content: Water: 50.0 % VOC content: 0.00 %

9.2 More information

void

RUBRIQUE 10: Stability and responsiveness

10.1 reactivity

None known from the information provided

10.2 Chemical stability

No decomposition in case of compliant use.

10.3 Possibility of dangerous reaction

Dangerous polymerization: No information available.

Dangerous reactions: No known dangerous reaction

10.4 Conditions to avoid

No other important information available

10.5 Incompatible materials

None known.

10.6 Dangerous composition products

None under normal conditions of use.

RUBRIQUE 11: Toxicological information

11.1 Toxicological Effects Information

Acute toxicity

LD/LC50 values that are relevant for classification:		
111-30-8 Glutaraldehyde		
Oral	LD50	134 mg/kg (rat)
Dermal	LD50	2,560 mg/kg (rabbit)

Skin corrosion/skin irritation

Strong caustic effect on skin and mucous membranes.

Severe eye damage/eye irritation

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 Very toxic 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.

RUBRIQUE 12: Ecological information

12.1 Toxicity

No other important information available.

12.2 Persistence and degradability

No other important information available.

12.3 Bioaccumulation Potential

No other important information available.

12.4 Mobility in the ground

No other important information available.

Other ecological indications:

Remark: Very Toxic for fish Toxic for fish ·

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. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms Harmful to aquatic organisms

12.5 Results of PBT and vPvB evaluations

not applicable

12.6 Other adverse effects

No other important information available.

RUBRIQUE 13: Elimination considerations

13.1 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 cleaning product: Water, if necessary with cleansing agents.

RUBRIQUE 14: Transportation information

14.1 UN Number

UN2922

DOT, ADR, IMDG, IATA

14.2 United Nations Shipping Name

Corrosive liquids, toxic, n.o.s.
(Glutaraldehyde)

DOT

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

ADR

IMDG

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

IATA

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

14.3 Transport Danger Class

DOT



class 8 Corrosive substances
label 8, 6.1

ADR



class 8 Corrosive substances

label 8+6.1

IMDG



class Corrosive substances

label 8/6.1

IATA



class Corrosive substances

label 8(6.1)

II

14.4 Packing Group
DOT, ADR, IMDG, IATA

14.5 DAngers for the environment

Marine pollutant

*Product contains environmentally hazardous substances: Glutaraldehyde
Yes (DOT) Symbol (fish and tree)*

Symbol (fish and tree)

Special marking (ADR)

14.6 Special precautions to be taken by the user
Hazard identification number (Kemler code)

Warning: Corrosive substances

EMS Number:

886

Segregation groups

F-A,S-B

Stowage Category

Acids

Stowage code

B

SW2 Clear of living quarters

14.7 Bulk transport in accordance with Schedule II of the MARPOL Convention and the IBC

Not applicable.

Transport/Additional information: ·

DOT ·

Quantity limitations

On passenger aircraft/rail: 0.5 L

On cargo aircraft only: 2.5 L

Remarks

Special marking with the symbol (fish and tree).

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)

0

Excepted quantities (EQ)

Code: E0

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging:



UN "Model Regulation": *500 ml*
UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (GLUTARALDEHYDE), 8 (6.1), II, ENVIRONMENTALLY HAZARDOUS

RUBRIQUE 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):
All components have the value ACTIVE.
- Hazardous Air Pollutants
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)
111-30-8 Glutaraldehyde A4
- NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

RUBRIQUE 16: More information

These indications are based on the current state of our knowledge, but do not constitute a guarantee as to the properties of the product and do not give rise to a contractual legal relationship. They do not claim to be exhaustive and should be considered as a guide

Acronyms and abbreviations:

- 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)



VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Toxicity - Oral 3: Acute toxicity – Category 3
Acute Toxicity - Inhalation 2: Acute toxicity – Category 2
Skin Corrosion 1B: Skin corrosion/irritation – Category 1B
Eye Damage 1: Serious eye damage/eye irritation – Category 1
Sensitization - Respiratory 1: Respiratory sensitisation – Category 1
Sensitization - Skin 1: Skin sensitisation – Category 1
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
End of the SDS