

Safety Data sheet

According to Directive 1907/2006

3833 GLUTARALDEHYDE SOLUTION 25% w/w GMP

Creation Date: 06/05/2016 Revision date: 31/05/2017

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Catalogue No: 3833 Product name: GLUTARALDEHYDE SOLUTION 25% w/w GMP Use of the substance: Analysis and chemical-pharmaceutical production.

Company/undertaking identification

QUALITY CHEMICALS, SL - C/Fornal 35. Pol. Ind. Can Comelles Sud 08292 ESPARREGUERA ESPAÑA Tel. 937709730 Fax. 937709337 e-mail: dtecnica@qualitychemicals.com

Emergency telephone No.

Quality Chemicals S.L. Tel. +34 937709730 Only in business hours. Instituto Nacional de Toxicología *Madrid* Tel:915620420 Chemtrec: 800-424-9300

2. Hazards identification

Labelling in accordance with directive 1907/2006



R-phrases

25 Toxic if swallowed.
23 Toxic by inhalation.
34 Causes burns.
42/43 May cause sensitization by inhalation and skin contact.
50 Very toxic to aquatic organisms.

S-phrases

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible)
61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

Labelling in accordance with directive 1272/2008

**H-phrases**

301 Toxic if swallowed.
331 Toxic if inhaled.
314 Causes severe skin burns and eye damage.
400 Very toxic to aquatic life.
334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
317 May cause an allergic skin reaction.

P-phrases

309+311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
305+351 If in eyes: Rinse cautiously with water for several minutes.
338 Remove contact lenses, if present and easy to do. Continue rinsing.
342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
273 Avoid release to the environment.

Signal word : DANGER

TOXIC; DANGEROUS FOR ENVIRONMENT

R-phrases:

Toxic if swallowed.
Toxic by inhalation.
Causes burns.
May cause sensitization by inhalation and skin contact.
Very toxic to aquatic organisms.

3.Composition/information on ingredients

For the full text of the R phrases mentioned in this section, see Section 16.

CAS-No.: 111-30-8

Molecular Weight: 100,11

Chemical formula: $C_5H_8O_2$

EC-No.: 203-856-5

R-phrases 25; 23; 34; 42/43; 50

For more information about the R-Phrases text you can consult the paragraph 16

4.First aid measures

Gloves necessity

Help the injured person wearing suitable protective equipment.

After inhalation:

Fresh air

Call the physician

After skin contact:

Rinse with abundant water (or have a shower)

Extract the substance by means of cotton impregnated with polietilenglicol 400

Undress immediately of the contaminated clothes

After eye contact:

Rinse with abundant water, keeping eyelids open (at least 10 min)

Call the ophthalmologist

After swallowing:

Drink several litters of water and avoid vomit (perforation risk)

Call the doctor

Do not carry out neutralization measures

5. Fire-fighting measures

Suitable extinguishing media:

Adapt the materials of the surroundings

Special risks:

Fireproof

Ambient fire may liberate hazardous vapours

Special protective equipment for fire fighting:

Remain in the risk area only if provided with independent artificial respiratory systems.

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Other information:

Avoid the penetration of the extinction water in superficial or subterranean aquifers.

6. Accidental release measures

Person-related precautionary measures:

Avoid contact with the substance

Not to inhale steam/aerosols

Ventilation in closed spaces

Procedures for cleaning/absorption:

To gather with absorbents

To come to the elimination of the remainders

Rinse.

Other information:

Neutralize with sodium bisulfite in excess to eliminate harmfulness.

Environmental protection measures:

Do not send it to the sewerage system

7. Handling and storage

Handling:

Work under display cabinet extractor

Do not inhale the substance

Avoid generation of steams

Storage:

Well closed

In well-ventilated place

Storage temperature: ambient

Only authorized access to specialized technicians

8. Exposure controls/personal protection

Exposure limit control

TLV-STEL: 0,05 ppm or 0,2 mg/m³

Personal protective equipment:

Respiratory protection:

Necessary when steam/aerosols are generated

Hand protection:

Needed

Protection gloves:

Nitrile rubber

Eye protection:

Needed

Other protective equipment:

Change immediately contaminated clothes

Recommendable preventive protection of the skin

Wash hands and face when the work is finished

Neither to eat, nor to drink, nor to smoke during the work

Work under extractor

Do not inhale the substance

Fulfill the commitments under local environmental protection legislation

9. Physical and chemical properties

Physical state: Liquid

Colour: Colourless to yellowish

Odour: Spicy

pH value: >3,0

Melting point: -10°C

Boiling point: 101°C

Ignition temperature: 275 °C

Vapour pressure: 22 hPa

Density (g/cm³): 1,060

Solubility: soluble (water)

log P(ow): -0,22 (solution 25%)

10. Stability and reactivity

Substances to be avoided:

Alkaline hydroxides.

Strong acids.

Aluminium.

Polymerization initiators.

Hazardous decomposition products:

Not available.

Further information:

Heat-sensitive.

Likely to polymerize.

Incompatible with metals.

Explosible with air in a vaporous/gaseous state.

11. Toxicological information

Acute toxicity:

LC50 (inhalation, rat): 0,48 mg/l /4 h (pure substance); LD50 (oral, rat): 134 mg/kg (pure substance)

After eye contact:

Irritation
Conjunctivitis
Córnea disorder
Burns

After skin contact:

Burns
Risk of skin sensitization

After inhalation:

Irritations of the mucous membranes
Coughing
Dyspnoea
Risk of airways sensitization

After swallowing:

Burns in mouth
Burns in throat
Burns in oesophagus
Burns in gastrointestinal tract
Risk of perforation in stomach
Risk of perforation in the oesophagus
Nausea
Vomiting
Diarrhoea
Cardiovascular failure
Coma

Further toxicological information:

Other dangerous characteristics are not discarded
Take the usual precautions for handling chemical products

12. Ecological information

Fishes: P. promelas LC50: 21,6 mg/l /96 h
Daphnia: Daphnia magna EC50: 20 mg/l /48 h
Algae: Desmodesmus subspicatus IC50: 0,61 mg/l /72 h (solution 50 %)
Bacteria: Ps. putida EC50: 13 mg/l /17 h (pure substance)
Log P(ow): -0,22 (solution 50%)
Degradability: Abiotic degradation: slow
BOD5 235 mg/g (pure substance)
COD 1385 mg/g (pure substance)
Biodegradability: High
Bioaccumulation: No bioaccumulation is to be expected (log Pow<1).

Other harmful effects:

Highly toxic for aquatic organisms
Bactericidal effect
When used properly, no impairments in the function of waste-water-treatment plants are to be expected
Do not allow to enter waters, waste water, or soil

13. Disposal considerations**Product:**

Dispose as regulated in the community countries by local regulations.
Please contact with the suitable authority in each case (Public Administration or company specialized in

Packaging:

Product packaging disposal must be disposed of in compliance with the respective local regulations.

For contaminated packaging the same measures must be adopted as for the contaminated product.
Not contaminated packaging must be disposed of as domestic residues or recycled material.
European Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

14. Transport information

Overland transport ADR/RID

UN: 2922
Class: 8 (6.1)
Packaging group: II
Correct technical name: CORROSIVE LIQUID, TOXIC, N.O.S.

Sea transport IMDG

UN: 2922
Class: 8/II (6.1)
Packaging group: II
Correct technical name: CORROSIVE LIQUID, TOXIC, N.O.S.

Air transport ICAO-IATA-DGR

UN: 2922
Class: 8 (6.1)
Packaging group: II
Correct technical name: CORROSIVE LIQUID, TOXIC, N.O.S.
CAO: 855
PAX: 851

15. Regulatory information

16. Other information

Full text of R phrases mentioned in sections 2 and 3

25 Toxic if swallowed.

23 Toxic by inhalation.

34 Causes burns.

42/43 May cause sensitization by inhalation and skin contact.

50 Very toxic to aquatic organisms.

The information contained herein is based on the present state of our knowledge.

It characterizes the product with regard to appropriate safety precautions. It does not represent a guaranty of the properties of the product.