

Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Revision Date: 05.08.2022 Version 2

TEKKİM

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

1.1 Product identifier

Catalog No. TK.090251.00000
Product Name Glutaraldehyde %50
Cas no 111-30-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Scientific research and development. Use as laboratory reagent.

1.2.2. Uses advised against

This product is not for consumer use.

1.3. Details of the supplier of the safety data sheet

Name TEKKİM KİMYA SAN. TİC. LTD. ŞTİ.
Street ORGANİZE SAN. BÖL. MAVİ CAD. 8. SOK. NO :1 NİLÜFER / BURSA
Telephone 0224 243 21 71
E-mail erhan@tekkim.com.tr
Company Representative Erhan DİLER

1.4 Emergency Telephone Number +90 506 990 36 86

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Acute toxicity, Oral, Category 4
Acute toxicity, By inhalation, Category 3
Skin Corrosion, Subcategory 1B
Serious eye damage, Category 1
Respiratory sensitization, Category 1
skin sensitizer, Category 1
Specific Target Organ Toxicity – Single exposure, Category 3, Respiratory system
Short term (acute) aquatic hazard, Category 1
Long (chronic) aquatic hazard, Category 1

For the full text of the H and EUH statements referred to in this section, see section 16.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictograms



Signal word (SEA)

DANGER

Hazard Statements (SEA)

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 Causes an allergic skin reaction.
H331 Toxic by inhalation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (SEA)



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Prevention

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Intervention

P301+P312 IF SWALLOWED: Call 114 POISON CENTER or doctor/physician if you feel unwell.

P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse your skin with water/shower.

P304+P340 IF INHALED: Move victim to fresh air and keep in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if fitted and easy to do. Continue rinsing.

SECTION 3: Composition/information on ingredients

Classification according to Regulation (EC) No. 1272/2008 (CLP)

3.1 Maddeler

EC No	--
Molar mass	--
Cas No	111-30-8
#FR3 clipboard#	(>= 50 % - < 70 %)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Following inhalation	Remove to fresh air. Call a doctor. If breathing stops: apply mechanical respiration immediately, with oxygen if necessary.
Following skin contact	Wash with plenty of water. Take off contaminated clothing.
Following eye contact	In case of contact with eyes, rinse immediately with plenty of water and consult an ophthalmologist.
Following ingestion	Give up to two glasses of water. Get medical help immediately. Do not induce vomiting. Do not let him drink a neutralizing agent.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water. Foam. Dry extinguishing powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

There is no restriction for this item.

5.2 Special hazards arising from the substance or mixture

It is prepared with flammable materials. May form explosive mixture with air at intense temperatures. In case of fire, dangerous flammable gases or vapors may develop.

5.3 Advice for firefighters

Special protective equipment for firefighters

Do not stay in dangerous zone without self-contained breathing apparatus. Keep a safe distance to cut off contact with skin and wear suitable protective clothing.

5.4 Additional information

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control.

SECTION 6: Accidental release measures



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6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Don't breathe vapours, aerosols. Avoid substance contact. Keep away from head and source of ignition. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Close drainage channels. Take up with liquid-absorbent material. Clean the affected area.

6.4 Reference to other sections

Disposal: see section 13.

6.5 Additional information

Clear spills immediately.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Advices on safe handling

Observe label precautions. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advices on general occupational hygiene

Change contaminated clothing. Wash hands after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in dry and well-ventilated places.

7.3 Specific end uses

There are no other specific uses other than those mentioned in section 1.2.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Methanol (67-56-1)

Exposure limit values TWA (8 Hours) 200 ppm
260 mg/m³

8.2 Exposure controls

Appropriate engineering controls

More attention should be paid to technical measures against the use of personal protective equipment.

Personal protection equipment

Eye/face protection

Fully fitting safety glasses

Hand protection



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Hand protection

Full contact

Glove material : Nitrile rubber

Glove thickness :0,40 mm

Break through time : >480 minute

Splash contact

Glove material : Latex

Glove thickness :0,60 mm

Break through time : >240 minute

The protective gloves to be used must comply with the specifications of directive 89/686/EEC and the related standart EN374.

Other skin protection

Protective chlothing.

Respiratory protection

Recommended Filter type:

Filter A (according to DIN 3181), for vapors of organic compounds

SECTION 9: Physical and chemical Properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Colorless
Odour	Fruity
Odour threshold	No information.
pH value	3,0 - 4,5 20 °C
Melting point/freezing point	-33 °C
Freezing point	No information.
Initial boiling point and boiling range	100 °C
Flash point	No information.
Evaporation rate	No information.
Flammability (solid, gas)	No information.
Upper/lower flammability or explosive limits	No information.
Upper/lower flammability or explosive limits	No information.
Vapour pressure	22 hPa 20 °C
Vapour density	1,1
Density	1,13 g/cm3 20 °C
Relative density	No information.
Water solubility (g/l)	Soluble.
Fat solubility (g/l)	No information.
Partition coefficient: n-octanol/water	log Pow: -0,35 20 °C - Bioaccumulation is not expected.
Auto-ignition temperature	No information.
Decomposition temperature	No information.

Viscosity

Kinematic viscosity	12,75 mm2/s 25 °C
Dynamic viscosity	15,4 mPa.s 25 °C
Explosive properties	Not classified as explosive.
Oxidising properties	none

SECTION 10: Stability and Reactivity

10.1 Reactivity

Forms explosive mixtures with air at intense temperatures.

10.2 Chemical stability



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The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

Violent reactions possible with strong alkalis, acids, amines, strong oxidizing agents.

10.4 Conditions to avoid

Heating. Strong heating.

10.5 Incompatible materials

Aluminum, various metals

10.6 Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

acute toxicity

Symptoms: If swallowed, there is a risk of perforation of the esophagus and stomach with severe burning of the mouth and throat.

Symptoms: Possible symptoms:, mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract.

Skin corrosion/irritation

The mixture causes burns.

Serious eye damage/eye irritation

Mixture causes serious eye injury. Risk of blindness!

Respiratory or skin sensitization

The mixture may cause allergy or asthma symptoms or breathing difficulties if inhaled. The mixture may cause an allergic skin reaction.

Specific Target Organ Toxicity - Single exposure

The mixture may cause respiratory irritation.


Acute toxicity by mouth - If swallowed, there is a risk of perforation of the esophagus and stomach with severe burns of the mouth and throat.

Acute inhalation toxicity - Possible symptoms:, mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

11.2 Additional information



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Components

glutaral

acute toxicity

LD50 Oral - Rat - male and female - 200 mg/kg
(US-EPA)

Symptoms: If swallowed, there is a risk of perforation of the esophagus and stomach with severe burning of the mouth and throat.

LC50 Inhalation - Rat - male and female - 4 h - 0.28 mg/l
(OECD Testing Guide 403)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

LD50 Dermal - Rabbit - male and female - > 1.000 mg/kg
(US-EPA)

Skin corrosion/irritation

Skin - Rabbit

Result: Abrasive - 4 h
(OECD Testing Guide 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irreversible effects on the eyes
(Draize Test)

Notes:

(50% solution)

Causes serious eye damage.

Respiratory or skin sensitization

May cause respiratory allergies and skin reactions. Chronic exposure may cause skin burns (dermatitis).

Germ cell mutagenicity

Mutagenicity (mammal cell test): chromosome disruption.

Chinese hamster lung cells

Result: positive

Notes:

(50% solution)

OECD Test Guidelines 486

Methanol

acute toxicity

Acute toxicity estimate Oral - 100.1 mg/kg
(Expert decision)

Symptoms: Nausea, Vomiting

Estimated acute toxicity Inhalation - 4 h - 3.1 mg/l
(Expert decision)

Symptoms: Irritant symptoms in the respiratory tract.

Acute toxicity estimate Dermal - 300.1 mg/kg
(Expert decision)

Specific Target Organ Toxicity – Single exposure

Causes damage to organs. - Eyes, Central nervous system

SECTION 12: Ecological information



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12.1 Toxicity

Toxicity to fish

LC50 - Pimephales promelas (Carp juvenile) - 10.8 mg/l - 96 h
(External product safety sheet)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 0.69 mg/l - 48 h
(External product safety sheet)

Toxicity to algae (algae)

IC50 - Desmodesmus subspicatus (green algae) - 0.61 mg/l - 72 h
(IUCLID)

12.2 Persistence and degradability

Biodegradability

83 % - Easily degradable.
(OECD Test Guideline 301 A)

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB.

12.6 Other adverse effects

Discharge into the environment should be avoided.

Glutaral

Toxicity to fish

static test LC50 - Oncorhynchus mykiss (Rainbow trout) - 0.8 mg/l - 96 h
(US-EPA)

Toxicity to algae (algae)

static test ErC50 - Desmodesmus subspicatus (green algae) - 0.6 mg/l - 72 h
(OECD Test Guideline 201)

Methanol

Toxicity to fish

flow-through test LC50 - Lepomis macrochirus (Bluegill) - 15,400.0 mg/l - 96 h
(US-EPA)

Toxicity to daphnia and other aquatic invertebrates

semi-static test EC50 - Daphnia magna (Water flea) - 18.260 mg/l - 96 h
(OECD Test Guideline 202)

Toxicity to algae (algae)

static test ErC50 - Pseudokirchneriella subcapitata (green algae) - approx. 22.000.0 mg/l - 96 h
(OECD Test Guideline 201)

Toxicity to bacteria

static test IC50 - activated sludge - > 1.000 mg/l - 3 h
(OECD Test Guideline 209)

SECTION 13: Disposal considerations

Waste treatment methods



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It must be disposed of in accordance with national and local regulations. Do not mix with other products. Uncleaned Treat packages as if it were the product itself ... Waste materials must be disposed of in accordance with national and local regulations.

SECTION 14: Transport information

ADR	IMDG	IATA	ADN	RID
14.1 UN number UN 2922	UN 2922	UN 2922	UN 2922	UN 2922
14.2 UN proper shipping name CORROSIVE LIQUID, TOXIC,N.O.S.(Glutaraldehyde % 50)	CORROSIVE LIQUID, TOXIC,N.O.S.(Glutaraldehyde % 50)	CORROSIVE LIQUID, TOXIC,N.O.S.(Glutaraldehyde % 50)	CORROSIVE LIQUID, TOXIC,N.O.S.(Glutaraldehyde % 50)	CORROSIVE LIQUID, TOXIC,N.O.S.(Glutaraldehyde % 50)
14.3 Transport hazard class(es) 8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)
				
14.4 Packing group I	I	I	I	I
14.5 Environmental hazards YES	YES	YES	YES	YES
No information available.	No information available.	No information available.	No information available.	No information available.

14.6 Special Precautions for User:

No information available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental legislation specific for the substance or mixture

This product safety data sheet complies with the requirements of EU Regulation 1907/2006.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been conducted for this substance.

SECTION 16: Other informations

Full text of H statements


- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 Causes an allergic skin reaction.
- H331 Toxic by inhalation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H410 Very toxic to aquatic life with long lasting effects.

Person Who Prepared the Safety Data Sheet:

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