

1. IDENTIFICATION

Product Name Glyoxal
Recommended use Synthesis of substances
Supplier Valudor Products, LLC.
 179 Calle Magdalena, Suite 100
 Encinitas, CA 92024
 (760) 635-8500
Emergency Telephone (800) 535-5053 (Infotrac)

2. HAZARD IDENTIFICATION

Classification

This product is considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Acute Tox. (Inhalation)	Category 4
Skin Corrosion/Irritation	Category 2
Eye Damage/Irritation	Category 2
Skin Sensitization	Category 1
Germ cell Mutagenicity	Category 2

Label Elements

GHS Pictograms



Signal Word Hazard Statements

Warning
 Harmful if inhaled
 Causes skin irritation
 Causes serious eye irritation
 May cause an allergic skin reaction
 Suspected of causing genetic defects

Precautionary Statements -Prevention

Avoid breathing fume/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wash thoroughly after handling
 Wear Eye protection/Face protection/protective gloves
 Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Contaminated work clothing must not be allowed out of the workplace

-Response

Take off contaminated clothing and wash it before reuse.
 If exposed or concerned: Get medical advice/attention

Eye	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing
Skin	If eye irritation persists: Get Medical advice/attention If on skin: Wash with plenty of water
Inhalation	If skin irritation or rash occurs: Get medical Advice/attention If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell
-Storage	Store Locked up
-Disposal	Dispose of contents/container in accordance with local/regional/national regulations
Hazards not other classified	None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS-No	Weight-%
<u>Glyoxal</u>	<u>107-22-2</u>	<u>30-50</u>

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned get medical advice. Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediately rinse with plenty of water. Remove contact lenses, if present and easy to do so. Keep eye wide open while rinsing. Continue rinsing for 15 minutes. Call a doctor/physician if irritation persists
Skin Contact	Wash off immediately with plenty of water. Immediately remove all contaminated clothes and shoes. If skin irritation persists, call a doctor/physician
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
Ingestion	Do not induce vomiting without medical advice. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical attention

Most important symptoms/effects, acute and delayed

Symptoms	No information available
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing Media Use any means suitable for extinguishing surrounding fire.

Unsuitable Extinguishing Media No information available

Specific Hazards Arising from the chemical

Hazardous combustion products Thermal decomposition can lead to the release of irritation or toxic gases and vapors; including and not limited to:
Carbon oxides

Protective equipment and precautions for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protection recommended in Section 8. Ensure adequate ventilation.

Methods and materials for containment and cleanup

Methods for clean-up Absorb with inert material. Keep unauthorized personnel away. Keep in suitable closed containers for disposal

Environmental Precautions Prevent entry into waterways or sewers

7. HANDLING AND STORAGE

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Handle in a well-ventilated environment. Avoid breathing vapors / spray / mist / fume. Wear personal protective equipment in section 8. Wash thoroughly after handling. Wash before breaks and at the end of the workday. Do not eat, drink or smoke when using this product. Clean equipment, work area and clothing regularly.

Conditions for safe storage, including any incompatibilities

Store in a cool/low-temperature, well-ventilated, dry place. Keep containers closed and labeled when not in use. Store locked up.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Glyoxal	TWA: 0.1 mg/m ³	-	-

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material, applicable exposure limits, job activities and other substances in the work place when designing controls and selecting personal protective equipment.

Personal Protective Equipment

Eye/face protection Tightly fitting safety goggles. If splashes are likely to occur wear a face shield.

Skin protection Long sleeved protective clothing. Choose the appropriate protective clothing and gloves based on the tasks being performed to avoid exposure to skin. Wear protective gloves.

Respiratory protection If exposure limits are exceeded or if irritation or other symptoms are experienced use a NIOSH/MSHA approved respirator

Hygiene Measures Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance	Colorless, Clear
Physical state	Liquid
Odor	Slight
Odor threshold	No information available
pH	Not applicable
Melting point / freezing point	No information available
Boiling point / Boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	No information available
Flammability or explosive limits	
Upper	No information available
Lower	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	No information available
Solubility in water	No information available
Partition coefficient	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available

10. STABILITY AND REACTIVITY

Reactivity	None known under normal conditions.
Chemical stability	Stable under ordinary conditions of use and storage.
Possibility of hazardous reactions	None known under normal processing.
Conditions to avoid	No information available
Incompatible materials	Strong bases. Strong oxidizing agents
Hazardous decomposition products	Hazardous combustion can lead to the release of irritating gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact	May cause skin irritation
Eye contact	May cause eye irritation
Inhalation	Harmful if inhaled
Ingestion	May be harmful if swallowed

Symptoms related to the physical chemical and toxicological characteristics

No information available

Delayed and immediate effects and also chronic effects form short and long-term exposure

Skin damage/irritation	Causes skin irritation
Eye damage/irritation	Causes serious eye irritation
Sensitization	May cause an allergic skin reaction
Mutagenic effects	Suspected of causing genetic defects
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT – single exposure	Not classified
STOT – repeated exposure	Not classified
Aspiration hazard	Not classified

Acute Toxicity**Component information**

Component	Cas-No	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glyoxal	107-22-2	> 2,000 mg/kg	> 2,000 mg/kg	>2.4 mg/L

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Should not be released to environment

Component	Freshwater Fish	Freshwater Algae	Water Flea
Glyoxal 107-22-2	LC50: 215 mg/L, 96h (Pimephales promelas)	EC50: > 500 mg/L, 96h (Desmodesmus subspicatus)	EC50: 404 mg/L, 48h (Daphnia magna)

Persistence and degradability No information available**Bioaccumulative potential** No information available**Mobility in soil** No information available**Other adverse effects** No information available**13. DISPOSAL CONSIDERATIONS****Waste Disposal Methods**

Processing, use or contamination of this product may occur during product use. Accordingly, it is the responsibility of the user to determine the proper disposal methodologies. Consult the appropriate state, regional or local regulations to ensure complete and accurate classification. Dispose of contaminated packaging in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated
 IATA Not regulated
 IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed

US Federal Regulations**TSCA section 12(b) Export Notification**

Not regulated

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Not applicable

SARA 311/312 Hazard Categorization

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Pressure	No
Reactivity	No

CERCLA/SARA 302 & 304

Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Not Applicable

Chemical name	Cas-No	CERCLA RQ

CWA (Clean Water Act)

Not Applicable

US State Regulations**California Proposition 65**

This product does not contain any proposition 65 chemicals

16. OTHER INFORMATION

NFPA Ratings Health: 2 Flammability: 0 Reactivity: 0

Creation Date: 9/19/2019

Revision Date:

Revision Number: 1

Product name: Glyoxal

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Revision Information: Creation

Disclaimer

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