

Luotian Guanghui CHEMICAL CO., LTD

No. 156, Dabieshan Road, Chemical parks, Economic development zone, Luotian County, Hubei, China 438600

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Material Safety Data Sheet

SECTION 1-CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: GLYOXAL (40%)

Synonyms: Oxalaldehyde; Biformal; Diformal; Ethandial; Ethane-1,2-dione;

Glyoxylaldehyde

Supplier:

Luotian Guanghui Chemical Co., Ltd

No. 156, Dabieshan Road, Chemical parks, Economic development zone, Luotian County, Hubei, China 438600

tel: 86-713-5067896

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Chemical Name	%
107-22-2	Glyoxal	40

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Harmful: danger of serious damage to health by prolonged exposure through inhalation, skin

contact and if swallowed. , May cause sensitization by skin contact

Category of Danger:

Harmful , Skin Sensitizer , Muta. cat. 3 , Lachrymator

Principle routes of exposure: Skin

Inhalation: Harmful: possible risk of irreversible effects through inhalation.

Ingestion: Harmful: danger of serious damage to health if ingested.

Skin contact: Harmful: danger of serious damage to health by prolonged skin contact.

May cause allergic skin reaction

Eye contact: Risk of serious damage to eyes

Vapors extremely irritating to eyes an respiratory tract

ANSI Classification Sensitizer - skin, Irritant - eye, severe

Statements of hazard HARMFUL IF SWALLOWED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.

MAY CAUSE ALLERGIC SKIN REACTION.

CAUSES EYE IRRITATION.

Statement of Spill or Leak - ANSI Label Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then

place in suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment.

Statement of First Aid If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give

anything by mouth to an unconscious person. Call a physician. In case of contact, immediately flush skin with plenty of

water. Remove contaminated clothing and shoes. In case of contact, flush eyes with running water for at least 15

minutes. Consult a physician for irritation or any other symptom.

Precautions - ANSI Label Do not taste or swallow. Wash thoroughly after handling.

Do not get in eyes, on skin, or on

clothing. Wash thoroughly after handling. Do not breathe vapors or spray mist Avoid prolonged or repeated contact with

skin. Wash thoroughly after handling.

SECTION 4. FIRST AID MEASURES

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

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Wash off immediately with soap and plenty of water Consult a physician if necessary

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Consult a physician Drink 1 or 2 glasses of water. Induce vomiting if person is conscious.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use dry chemical, CO₂, water spray or "alcohol" foam Specific hazards: Burning produces irritant fumes.

Unusual hazards: None known

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

Specific methods: Water mist may be used to cool closed containers.

Flash point: 220 °C (closed cup)

Autoignition temperature: 285 °C

NFPA rating:

NFPA Health: 1

NFPA Flammability: 3

NFPA Reactivity: 0

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: Soak up with inert absorbent material. Prevent product from entering drains

SECTION 7. HANDLING AND STORAGE

Storage:

ROOM TEMPERATURE

Handling: Use only in area provided with appropriate exhaust ventilation.

Safe handling advice: Wear personal protective equipment. Remove and wash contaminated clothing before reuse.

Technical measures/storage conditions: Keep containers tightly closed in a cool, well-ventilated place. Keep container tightly closed in a dry and wellventilated place.

Incompatible products: Oxidising and spontaneously flammable products

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Impervious clothing Long sleeved clothing

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety

practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor Clear and colorless

Physical state: Liquid

Formula: C₂H₂O₂

Molecular weight: 58.04

Melting point/range: -15 °C at 760 mmHg

Boiling point/range: 104 °C at 760 mmHg

Density: 1.270 g/ml

Vapor pressure: 293.3 hPa at 20 °C

Evaporation rate: No data available

Vapor density: No data available

Solubility (in water): Soluble

Flash point: 220 °C (closed cup)

Autoignition temperature: 285 °C

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Polymerization: None under normal processing.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapours such as carbon oxides.

Materials to avoid: -

Forms explosive mixture with air. A strong reducing agent; reacts violently with oxidizers. Heat or contact with water, strong bases causes polymerization. Incompatible with strong acids, caustics,

Conditions to avoid: Exposure to air or moisture over prolonged periods.

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity

Components RTECS Number: Selected LD50s and LC50s

GLYOXAL MD2650000 Oral LD50 Rat : 200 mg/kg

Oral LD50 Mouse : 400 mg/kg

Dermal LD50 Rabbit : 10 mL/kg

Chronic toxicity: Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

Local effects: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Specific effects: May include moderate to severe erythema (redness) and moderate edema (raised

skin), nausea, vomiting, headache.

Primary irritation: No data is available on the product itself.

Carcinogenic effects: No data is available on the product itself.

Mutagenic effects: Substances which cause concern for man owing to possible mutagenic effects but for

which the available information is not adequate for making a satisfactory assessment.

Reproductive toxicity: No data is available on the product itself.

SECTION 12. ECOLOGICAL INFORMATION

Mobility: NA

Bioaccumulation: NA

Ecotoxicity effects: NA

Aquatic toxicity: May cause long-term adverse effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste disposal must be in accordance with appropriate

Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging: Do not re-use empty containers

Methods for cleaning up: Soak up with inert absorbent material. Prevent product from entering drains

SECTION 14. TRANSPORT INFORMATION

UN/Id No: Not regulated

DOT:

Proper shipping name: Not Regulated

Components U.S. DOT - Appendix A Table 1 - Reportable Quantities

GLYOXAL Not Listed

TDG (Canada):

WHMIS hazard class: D2b toxic materials

IMDG/IMO

IMDG - Hazard Classifications Not Applicable

Components U.S. DOT - Appendix B - Marine Pollutan U.S. DOT - Appendix B -

Severe Marine

Pollutants

GLYOXAL Not Listed

SECTION 15. REGULATORY INFORMATION

International Inventories

U.S. regulations:

Components California Proposition 65

Massachusetts Right to

Know List:

New Jersey Right to

Know List:

Pennsylvania Right to Know

List:

GLYOXAL Not Listed

Components Florida substance List: Rhode Island Right to

Know List:

Illinois - Toxic Air

Contaminants

Connecticut - Hazardous Air

Pollutants

GLYOXAL Not Listed

Components SARA 313 Emission

reporting/Toxic Release

of Chemicals

CERCLA/SARA - Section

302 Extremely Haz

NTP: IARC:

GLYOXAL Not Listed

2-509; 2-510

Canada DSL Inventory List - Present

Korean KECL: KE-27447

Philippines PICCS: Present

Australia (AICS): Present

Inventory - United States TSCA - Sect. 8(b)

Inventory - China: Present

Present

EU EINECS List - 203-474-9; C₂H₂O₂

Catalog Number: 203586 Product name: GLYOXAL

Components

GLYOXAL

SARA 313 Notification: The above is your notification as to the SARA 313 listing for this product(s) pursuant

to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of

1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification: The above information is your notice as to the Right-to-Know listings of the stated

product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

SECTION 16. OTHER INFORMATION

Prepared by: Health & Safety

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