

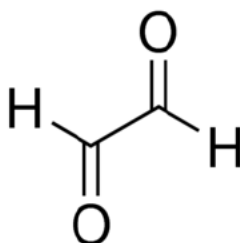
CAS-No.: 107-22-2 MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Substance  
:  
CAS-No. : 107-22-2  
Product code : 03988  
Formula : C<sub>2</sub>H<sub>2</sub>O<sub>2</sub>  
Chemical structure :



Synonyms : Ethanedial

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

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial  
For professional use only

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries  
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,  
Ludhiana Pb. (141007)  
+91 9316777775, +91 7707855700  
[sales@labogens.com](mailto:sales@labogens.com) - [www.Labogens.com](http://www.Labogens.com)

#### 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Acute toxicity (inhal.), H331  
Category 3  
Skin corrosion/irritation, H315  
Category 2  
Serious eye damage/eye H319  
irritation, Category 2  
Skin sensitisation, H317

# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

category 1B  
Germ cell mutagenicity, H341  
Category 2

Full text of H statements : see section 16

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36/37/38

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

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

Hazard pictograms (CLP)

:



GHS06



GHS08

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H331 - Toxic if inhaled.  
H341 - Suspected of causing genetic defects.

Precautionary statements (CLP)

: P261 - Avoid breathing dust, fume, gas, vapours, spray, mist.  
P280 - Wear protective clothing, protective gloves, eye protection, face protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P311 - Call a POISON CENTER/doctor

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : GLYOXAL 40% FOR SYNTHESIS  
CAS-No. : 107-22-2

Full text of R- and H-statements: see section 16

# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.   |
| First-aid measures after skin contact | : Wash with plenty of water/.... Wash contaminated clothing before reuse. Get medical advice/attention.  |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. |
| First-aid measures after ingestion    | : Rinse mouth. Get medical advice/attention.   |

### 4.2. Most important symptoms and effects, both acute and delayed

|                                     |  |
|-------------------------------------|--|
| Symptoms/effects                    | : May cause an allergic skin reaction. Suspected of causing genetic defects. |
| Symptoms/effects after inhalation   | : Toxic if inhaled.  |
| Symptoms/effects after skin contact | : Causes skin irritation.  |
| Symptoms/effects after eye contact  | : Causes serious eye irritation.   |

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Water spray. Foam. Dry powder. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.               |

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

|                                |   |
|--------------------------------|---|
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
|--------------------------------|---|

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

|                      |                                   |
|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

#### 6.1.2. For emergency responders

|                      |  |
|----------------------|--|
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Ventilate area.                                |

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

|                         |  |
|-------------------------|--|
| Methods for cleaning up | : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. |
|-------------------------|--|

### 6.4. Reference to other sections

No additional information available

# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                               |  |
|-------------------------------|--|
| Precautions for safe handling | : Do not breathe vapours. Avoid contact with skin and eyes. Provide good ventilation in process area to prevent formation of vapour. |
| Hygiene measures              | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.              |

#### 7.2. Conditions for safe storage, including any incompatibilities

|                    |  |
|--------------------|--|
| Storage conditions | : Store in a well-ventilated place. Keep container tightly closed. |
|--------------------|--|

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

|                          |  |
|--------------------------|--|
| Hand protection          | : Protective gloves  |
| Eye protection           | : Chemical goggles or safety glasses                               |
| Skin and body protection | : Wear suitable protective clothing                                |
| Respiratory protection   | : [In case of inadequate ventilation] wear respiratory protection. |

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|  |                         |
|--|-------------------------|
| Physical state                             | : Liquid                |
| Molecular mass                             | : 58.04 g/mol           |
| Colour                                     | : Clear Colorless.      |
| Odour                                      | : characteristic odour. |
| Odour threshold                            | : No data available     |
| pH   | : Neutral               |
| Relative evaporation rate (butylacetate=1) | : No data available     |
| Melting point                              | : No data available     |
| Freezing point                             | : No data available     |
| Boiling point                              | : 51 °C                 |
| Flash point                                | : No data available     |
| Auto-ignition temperature                  | : No data available     |
| Decomposition temperature                  | : No data available     |
| Flammability (solid, gas)                  | : No data available     |

# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

|                                  |                           |
|----------------------------------|---------------------------|
| Vapour pressure                  | : 17535 mm Hg (at 20°C)   |
| Relative vapour density at 20 °C | : 0.62                    |
| Relative density                 | : No data available       |
| Density                          | : 1.27 g/cm³              |
| Solubility                       | : Water: Soluble in water |
| Log Pow                          | : No data available       |
| Viscosity, kinematic             | : No data available       |
| Viscosity, dynamic               | : No data available       |
| Explosive properties             | : No data available       |
| Oxidising properties             | : No data available       |
| Explosive limits                 | : No data available       |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                                   |   |
|-----------------------------------|---|
| Acute toxicity                    | : Inhalation: Toxic if inhaled.                 |
| Skin corrosion/irritation         | : Causes skin irritation.<br>pH: Neutral        |
| Serious eye damage/irritation     | : Causes serious eye irritation.<br>pH: Neutral |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction.          |
| Germ cell mutagenicity            | : Suspected of causing genetic defects.         |
| Carcinogenicity                   | : Not classified                                |

# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

|                        |                  |
|------------------------|------------------|
| Reproductive toxicity  | : Not classified |
| STOT-single exposure   | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard      | : Not classified |

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

No additional information available

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

|               |                  |
|---------------|------------------|
| UN-No. (ADR)  | : Not applicable |
| UN-No. (IMDG) | : Not applicable |
| UN-No. (IATA) | : Not applicable |
| UN-No. (ADN)  | : Not applicable |
| UN-No. (RID)  | : Not applicable |

#### 14.2. UN proper shipping name

|                             |                  |
|-----------------------------|------------------|
| Proper Shipping Name (ADR)  | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |

# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

|                             |                  |
|-----------------------------|------------------|
| Proper Shipping Name (IATA) | : Not applicable |
| Proper Shipping Name (ADN)  | : Not applicable |
| Proper Shipping Name (RID)  | : Not applicable |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |                  |
|----------------------------------|------------------|
| Transport hazard class(es) (ADR) | : Not applicable |
|----------------------------------|------------------|

#### IMDG

|                                   |                  |
|-----------------------------------|------------------|
| Transport hazard class(es) (IMDG) | : Not applicable |
|-----------------------------------|------------------|

#### IATA

|                                   |                  |
|-----------------------------------|------------------|
| Transport hazard class(es) (IATA) | : Not applicable |
|-----------------------------------|------------------|

#### ADN

|                                  |                  |
|----------------------------------|------------------|
| Transport hazard class(es) (ADN) | : Not applicable |
|----------------------------------|------------------|

#### RID

|                                  |                  |
|----------------------------------|------------------|
| Transport hazard class(es) (RID) | : Not applicable |
|----------------------------------|------------------|

### 14.4. Packing group

|                      |                  |
|----------------------|------------------|
| Packing group (ADR)  | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |
| Packing group (ADN)  | : Not applicable |
| Packing group (RID)  | : Not applicable |

### 14.5. Environmental hazards

|                               |  |
|-------------------------------|--|
| Dangerous for the environment | : No                                     |
| Marine pollutant              | : No                                     |
| Other information             | : No supplementary information available |

### 14.6. Special precautions for user

#### - Overland transport

No data available

#### - Transport by sea

No data available

#### - Air transport

No data available

#### - Inland waterway transport

No data available

#### - Rail transport

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

No REACH Annex XVII restrictions

GLYOXAL 40% FOR SYNTHESIS is not on the REACH Candidate List

GLYOXAL 40% FOR SYNTHESIS is not on the REACH Annex XIV List

### 15.1.2. National regulations

#### Germany

Reference to AwSV : Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV; ID No. 1130)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

#### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-statements:

|                           |   |
|---------------------------|---|
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhal.), Category 3           |
| Eye Irrit. 2              | Serious eye damage/eye irritation, Category 2 |
| Muta. 2                   | Germ cell mutagenicity, Category 2            |
| Skin Irrit. 2             | Skin corrosion/irritation, Category 2         |
| Skin Sens. 1B             | Skin sensitisation, category 1B               |
| H315                      | Causes skin irritation.                       |
| H317                      | May cause an allergic skin reaction.          |



# GLYOXAL 40% FOR SYNTHESIS

## Safety Data Sheet

|           |   |
|-----------|---|
| H319      | Causes serious eye irritation.                  |
| H331      | Toxic if inhaled.                               |
| H341      | Suspected of causing genetic defects.           |
| R36/37/38 | Irritating to eyes, respiratory system and skin |
| Xi        | Irritant  |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*