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

1.1. Product identifier

Trade name: GLUTARALDEHYDE FOR SYNTHESIS (25% aqueous solution)

Product code: 14700

Identification of the product: Glutaraldehyde For Synthesis (25% aqueous solution)

CAS No: 111-30-8

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

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification: MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel:

+91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442.

Email: info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-421 503

1.4. Emergency telephone number

Emergency number: +91 22 4066 8111 (10:00am - 6:00 pm).

2. Hazards identification

2.1. Classification of the substance or mixture

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

[CLP]Mixtures/Substances: SDS EU 2015: According to

Regulation (EU) 2015/830 (REACH Annex II)

Acute toxicity (oral), H302

Category 4

Acute toxicity (inhalation:gas), H332

Category 4

Skin corrosion/irritation, H314

Category 1B

Respiratory sensitisation, H334

Category 1

Skin sensitisation, H317

Category 1

Specific target organ toxicity — single exposure, H370

Category 1

Hazardous to the aquatic environment — Acute Hazard, H400

Category 1

Adverse physicochemical, human health and environmental effects

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

Symbol(s): T: Very toxic

N: Dangerous for the environment





R Phrase(s): R23/25: Toxic by inhalation and if swallowed.

R34: Cause burns.

R42/43: May cause sensitisation by inhalation and skin contact.

R51: Toxic to aquatic organisms.

S Phrase(s): S26: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advise.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61: avoid release to the environment . refer to special instruction/safety data sheets.

S36/37/39: Wear suitable protective clothing and gloves & eye/face protecting.

Hazard pictograms









Signal word: Danger

Hazard statements: H302+H332 - Harmful if swallowed or if inhaled

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H370 - Causes damage to organs.

H400 - Very toxic to aquatic life.

Precautionary statements: P260 - Do not breathe dust, fume, gas, vapours, spray, mist.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eve 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.

P310 - Immediately call a POISON CENTER/doctor

2.3. Other hazards

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3. Composition/information on ingredients

3.1. Substances

Substance name	Contents	CAS No
Water	50% - 75%	7732-18-5
Glutaraldehyde	25% - 50%	111-30-8
Methanol	5% - 10%	67-56-1

Substance.

Contains no other components or impurities which will influence the classification of the product.

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. Immediately call a POISON CENTER/doctor. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

Immediately call a POISON CENTER/doctor. Wash with plenty of water/.... Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects: Causes severe skin burns and eye damage. Suspected of causing genetic defects.

Symptoms/effects after inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

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

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No additional information available

5.3. Advice for firefighters

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

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

7. Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid breathing dust, fume, gas, vapours, spray, mist. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.

Storage conditions: Keep container tightly closed. Store in original container. Store in a dry place.

7.3. Specific end use(s)

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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 face shield

Skin and body protection: Wear suitable protective clothing

Respiratory protection: In case of inadequate ventilation wear respiratory protection.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Odour threshold: No data available

pH: 3.1 - 4.5

Relative evaporation rate (butylacetate=1): No data available

Melting point : -10 °C

Freezing point : No data available

Boiling point: 101 °C

Flash point: No data available

Auto-ignition temperature : No data available **Decomposition temperature :** No data available **Flammability (solid, gas) :** No data available **Vapour pressure :** 0.0203 hPa at 20 °C

Relative vapour density at 20 °C: 0.8 Relative density: No data available

Density : 1.06 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

10. Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability

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Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Air contact. Direct sunlight. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Oral: Harmful if swallowed. Inhalation:gas: Harmful if inhaled.

ATE CLP (oral) 500 mg/kg bodyweight

ATE CLP (gases) 4500 ppmv/4h

Skin corrosion/irritation: Causes severe skin burns and eye damage.

pH: 3.1 - 4.5

Serious eye damage/irritation: Serious eye damage, category 1, implicit

pH: 3.1 - 4.5

Respiratory or skin sensitisation: May cause allergy or asthma symptoms or breathing

difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified Reproductive toxicity: Not classified

STOT-single exposure: Causes damage to organs.

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

Potential adverse human health effects and symptoms: Harmful if swallowed.

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

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No additional information available

12.6. Other adverse effects

No additional information available

13. Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal

Recommendations: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

14. Transport information

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

14.1. UN number

UN-No. (ADR): 3082 UN-No. (IMDG): 3082 UN-No. (IATA): 3082 UN-No. (ADN): 3082 UN-No. (RID): 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIOUID, N.O.S.

Proper Shipping Name (IMDG): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Proper Shipping Name (IATA): Environmentally hazardous substance, liquid, n.o.s.

Proper Shipping Name (ADN): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIOUID, N.O.S.

Proper Shipping Name (RID): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIOUID, N.O.S.

Transport document description (ADR): UN 3082 ENVIRONMENTALLY

HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (-)

Transport document description (IMDG): UN 3082 ENVIRONMENTALLY

HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III,

MARINE POLLUTANT

Transport document description (IATA): UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III

Transport document description (ADN): UN 3082 ENVIRONMENTALLY

HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

Transport document description (RID): UN 3082 ENVIRONMENTALLY

HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

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14.3. Transport hazard class(es)

ADR- Transport hazard class(es) (ADR): 9

Danger labels (ADR): 9

IMDG- Transport hazard class(es) (IMDG): 9

Danger labels (IMDG): 9

IATA- Transport hazard class(es) (IATA): 9

Hazard labels (IATA): 9

ADN- Transport hazard class(es) (ADN): 9

Danger labels (ADN): 9

RID- Transport hazard class(es) (RID): 9

Danger labels (RID): 9

14.4. Packing group

Packing group (ADR): III
Packing group (IMDG): III
Packing group (IATA): III
Packing group (ADN): III
Packing group (RID): III

14.5. Environmental hazards

Dangerous for the environment: Yes

Marine pollutant : Yes

Other information: No supplementary information available

14.6. Special precautions for user

Overland transport- Classification code (ADR): M6

Special provisions (ADR): 274, 335, 375, 601

Limited quantities (ADR): 51 Excepted quantities (ADR): E1

Packing instructions (ADR): P001, IBC03, LP01, R001

Special packing provisions (ADR): PP1 Mixed packing provisions (ADR): MP19

Portable tank and bulk container instructions (ADR): T4

Portable tank and bulk container special provisions (ADR): TP1, TP29

Tank code (ADR): LGBV Vehicle for tank carriage: AT Transport category (ADR): 3

Special provisions for carriage – Packages (ADR): V12

Special provisions for carriage - Loading, unloading and handling (ADR): CV13

Hazard identification number (Kemler No.): 90

Orange plates:

Tunnel restriction code (ADR): -

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EAC code: •3Z

Transport by sea- Special provisions (IMDG): 274, 335, 969

Limited quantities (IMDG): 5 L Excepted quantities (IMDG): E1

Packing instructions (IMDG): LP01, P001 Special packing provisions (IMDG): PP1 IBC packing instructions (IMDG): IBC03

Tank instructions (IMDG): T4

Tank special provisions (IMDG): TP2, TP29

EmS-No. (Fire): F-A EmS-No. (Spillage): S-F Stowage category (IMDG): A

MFAG-No: 171

Air transport- PCA Excepted quantities (IATA): E1

PCA Limited quantities (IATA): Y964

PCA limited quantity max net quantity (IATA): 30kgG

PCA packing instructions (IATA): 964
PCA max net quantity (IATA): 450L
CAO packing instructions (IATA): 964
CAO max net quantity (IATA): 450L

Special provisions (IATA): A97, A158, A197

ERG code (IATA): 9L

Inland waterway transport- Classification code (ADN): M6

Special provisions (ADN): 274, 335, 375, 601

Limited quantities (ADN): 5 L Excepted quantities (ADN): E1 Carriage permitted (ADN): T Equipment required (ADN): PP

Number of blue cones/lights (ADN): 0

Rail transport- Classification code (RID): M6 Special provisions (RID): 274, 335, 375, 601

Excepted quantities (RID): E1

Packing instructions (RID): P001, IBC03, LP01, R001

Special packing provisions (RID): PP1 Mixed packing provisions (RID): MP19

Portable tank and bulk container instructions (RID): T4

Portable tank and bulk container special provisions (RID): TP1, TP29

Tank codes for RID tanks (RID): LGBV

Transport category (RID): 3

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Special provisions for carriage – Packages (RID): W12

Special provisions for carriage - Loading, unloading and handling (RID): CW13, CW31

Colis express (express parcels) (RID) : CE8

Hazard identification number (RID): 90

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV: Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal

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

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen: None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Borstvoeding: None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen –

Vruchtbaarheid: None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Ontwikkeling: None of the components are 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

15.2. Chemical safety assessment

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16. Other information

Abbreviations and acronyms: PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 **Further information**: None.

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End of document

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