

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.11.2022

Revision: 28.11.2022

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

- **Product identifier**
- **Trade name:** Mono ethylene glycol
- **CAS Number:**
107-21-1
- **EC number:**
203-473-3
- **Index number:**
603-027-00-1
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Rama Chem Trading FZE
WS23, A1008, Tower A, Jafza one building, Jebel ali,
Dubai, UAE
- **Further information obtainable from:**
Product safety department.
info@ramagroup.ae
- **Emergency telephone number:** +971 50 406 1790

2 Hazards identification

- **Classification of the substance or mixture**



health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements**
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Warning
- **Hazard statements**
Harmful if swallowed.

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May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards**· Results of PBT and vPvB assessment**

· PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients**· Chemical characterisation: Substances****· CAS No. Description**

107-21-1 Ethylene glycol

· Identification number(s)

· EC number: 203-473-3

· Index number: 603-027-00-1

4 First aid measures**· Description of first aid measures****· General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation: *Supply fresh air; consult doctor in case of complaints.*

· After skin contact: *Generally the product does not irritate the skin.*

· After eye contact: *Rinse opened eye for several minutes under running water.*

· After swallowing: *Call for a doctor immediately.*

· Information for doctor:

· Most important symptoms and effects, both acute and delayed *No further relevant information available.*

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures**· Extinguishing media**

· Suitable extinguishing agents: *Use fire extinguishing methods suitable to surrounding conditions.*

· Special hazards arising from the substance or mixture *No further relevant information available.*

· Advice for firefighters

· Protective equipment: *No special measures required.*

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures *Not required.*

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

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- **Methods and material for containment and cleaning up:**
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

 · **Ingredients with limit values that require monitoring at the workplace:**

107-21-1 Ethylene glycol

TLV (USA)	Short-term value: 10** mg/m ³ , 50* ppm Long-term value: 25* ppm *vapor fraction: **inh. fraction, aerosol only, A4
WEEL (USA)	I (2)
IOELV (EU)	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin
WEL (Great Britain)	Short-term value: 104** mg/m ³ , 40** ppm Long-term value: 10* 52** mg/m ³ , 20** ppm Sk *particulate **vapour

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
- **Respiratory protection:**
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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· Protection of hands:

Protective gloves

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:

Form:	<i>Liquid.</i>
Colour:	<i>Colourless</i>

· Odour:	<i>Sweetish</i>
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· Odour threshold:	<i>Not determined.</i>
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· pH-value:	<i>9</i>
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· Change in condition

Melting point/freezing point:	<i>-11.2 °C</i>
Initial boiling point and boiling range:	<i>197 °C</i>

· Flash point:	<i>111 °C closed cup</i>
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· Flammability (solid, gas):	<i>Not applicable.</i>
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· Auto Ignition temperature:	<i>398 °C</i>
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· Decomposition temperature:	<i>Not determined.</i>
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· Molecular weight:	<i>62 g/mol</i>
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· Explosive properties:	<i>Not determined.</i>
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· Explosion limits:

Lower:	<i>3.2 Vol %</i>
Upper:	<i>15.3 Vol %</i>

· Vapour pressure at 20 °C:	<i>0.067 hPa at 20 °C</i>
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- **Relative Vapor Density (air = 1)** 2.1
- **Relative Density (water = 1)** 1.115 at 20 °C
- **Evaporation rate** 0.01 (Butyl Acetate = 1)

- **Water solubility:** 100%

- **n-octanol/water partition coefficient (log Pow):** -1.36

- **Viscosity**
- **Dynamic at 20 °C:** 19.83 mPa.s at 20 °C
- **Kinematic:** Not determined.

- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

Oral	LD50	5,840 mg/kg (rat)
Dermal	LD50	9,530 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADR, IMDG, IATA	Void
· UN proper shipping name · ADR, IMDG, IATA	Void
· Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· Packing group · ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Warning
- **Hazard statements**
Harmful if swallowed.

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IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** Substance is not listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department.

· **Contact:** PME

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2