



Partners in Success

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Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 31.07.2024

Version number 1

Revision: 31.07.2024

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

1.1 Product identifier

Trade name: Ethylene Glycol

CAS number:

107-21-1

EC number:

203-473-3

Index number:

603-027-00-1

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

Sector of Use: Product supplied for professional use only

Application of the substance / the preparation:

Relevant identified uses: Polymer Production

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

EQUATE Petrochemical Company (K.S.C.C)

PO Box 100, Ahmadi-61001, Kuwait

Tel: +965-2325 2465

Fax: +965 2326 1387

Email: info@equate.com

Web: www.equate.com

Further information obtainable from:

B-Lands Consulting

5 Place Robert Schuman, BP 1516

38025 Grenoble, FRANCE

Tel: +33 476 295 869

Fax: +33 476 295 870

Email: clients@reachteam.eu

www.reachteam.eu

1.4 Emergency telephone number(s):

NCEC - English Support Only:

EMEA/Worldwide: +44 1865 407333

Americas/Worldwide +1 202 464 2554

APAC/Worldwide: +65 3165 2217

Ireland - National Poisons Information Centre: 01 837 9964 or 01 809 2566 (healthcare professionals only).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

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

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

The substance is classified and labelled according to the CLP regulation.

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Hazard pictograms:



GHS07 GHS08

Signal word: Warning

Hazard-determining components of labelling:

ethanediol

Hazard statements:

H302 Harmful if swallowed.

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

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS Number. Description.

107-21-1 ethanediol

Identification number(s)

EC number: 203-473-3

Index number: 603-027-00-1

Hazardous components:

CAS: 107-21-1	ethanediol	STOT RE 2, H373; Acute Tox. 4, H302	50-100%
EINECS: 203-473-3			

SECTION 4: First aid measures

4.1 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 is recommended.

After inhalation: Move patient to fresh air, if symptoms persist consult a doctor.

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



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

After swallowing: Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Carbon dioxide (CO₂). Dry chemical. Foam.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

6.2 Environmental precautions

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up

Dispose contaminated material as waste according to section 13.

6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures required.

No special precautions are necessary if used correctly.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s): No further relevant information available.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

107-21-1 ethanediol

OEL	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin, IOELV
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DNELs

107-21-1 ethanediol

Dermal	DNEL - Long-term exposure - systemic effects	53 mg/kg bw/day (General Population) 106 mg/kg bw/day (worker)
Inhalative	DNEL (EC) - Long-term exposure - local effects	7 mg/m ³ (General Population) 35 mg/m ³ (worker)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Individual protection measures, such as personal protective equipment

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.

Respiratory protection: Not required.

Hand protection

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.

Select the glove material based on a 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 must be determined by the manufacturer of the protective gloves.

Eye/face protection Goggles recommended during refilling

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Colour:	Colourless.
Odour:	Sweet.
Odour threshold:	Not determined.
Melting point/freezing point:	Not determined.
Boiling point or initial boiling point and boiling range	197.4 °C
Flammability	Not determined.



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Lower and upper explosion limit

Lower:	3.2 Vol %
Upper:	15.3 Vol %
Flash point:	111 °C (107-21-1 ethanediol)
Auto-ignition temperature:	398 °C
Decomposition temperature:	Not determined.
pH	Not determined.
VOC (EC):	
Dynamic:	Not determined.
Solubility	
Water:	100 %
Partition coefficient n-octanol/water (log value)	-1.36 log POW
Vapour pressure at 25 °C:	0.123 hPa
Density and/or relative density	
Density:	Not determined.
Relative density at 20 °C	1.115
Vapour density	Not determined.

9.2 Other information

Appearance:	
Form:	Liquid.
Explosive properties:	Product does not present an explosion hazard.
Softening point/range	
Oxidising properties	Not determined.
Evaporation rate	Not determined.

Information with regard to physical hazard classes

Explosives	Not applicable.
Flammable gases	Not applicable.
Aerosols	Not applicable.
Oxidising gases	Not applicable.
Gases under pressure	Not applicable.
Flammable liquids	Not applicable.
Flammable solids	Not applicable.
Self-reactive substances and mixtures	Not applicable.
Pyrophoric liquids	Not applicable.
Pyrophoric solids	Not applicable.
Self-heating substances and mixtures	Not applicable.
Substances and mixtures, which emit flammable gases in contact with water	Not applicable.
Oxidising liquids	Not applicable.
Oxidising solids	Not applicable.
Organic peroxides	Not applicable.
Corrosive to metals	Not applicable.
Desensitised explosives	Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.



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10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials No further relevant information available.

10.6 Hazardous decomposition products

Possible decomposition products: carbonyl compounds, Dioxolan derivatives

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.

LD/LC50 values:

107-21-1 ethanediol

Oral	LD50	7,712 mg/kg (Rat)
Dermal	LD50	3,500 mg/kg (mouse)
Inhalative	LC50	2.5 mg/L (Rat)

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure:

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Substance is not listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.



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12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional environmental 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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation:

Disposal must be made in accordance with official regulations.

Packaging that may not be cleansed must be disposed of in the same manner as the product.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN number or ID number

ADR, IMDG, IATA Not applicable.

14.2 UN proper shipping name

ADR, IMDG, IATA Not applicable.

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA
Class Not applicable.

14.4 Packing group

ADR, IMDG, IATA Not applicable.

14.5 Environmental hazards Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Maritime transport in bulk according to

IMO instruments Not applicable.

SECTION 15: Regulatory information

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Directive 2012/18/EU

Named dangerous substances - ANNEX I The substance is not listed

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

Substance is not listed.



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REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS
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Substance is not listed.

Regulation (EC) No 273/2004 on drug precursors

Substance is not listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Substance is not listed.

15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

SECTION 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.

Relevant phrases

H302 Harmful if swallowed.

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

Date of previous version: 31.07.2024

Abbreviations and acronyms:

WEL: Workplace Exposure Limits

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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity – Category 4

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