

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Ethylene Glycol  
50% (v/v) 1:1
- **Article number:** 3685
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2B H320 Causes eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Ethylene Glycol
- **Hazard statements**  
Harmful if swallowed.  
Causes skin and eye irritation.
- **Precautionary statements**  
Wash thoroughly after handling. Do not touch eyes.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves.  
If swallowed: Call a poison center/doctor if you feel unwell.

(Contd. on page 2)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name: Ethylene Glycol**  
**50% (v/v) 1:1**

(Contd. of page 1)

*If on skin: Wash with plenty of water.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 107-21-1	Ethylene Glycol	52.607%
---------------	-----------------	---------

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	47.393%
----------------	-------	---------

## 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:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

*Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

· **After swallowing:** Immediately call a doctor.

· **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.*

US

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name:** Ethylene Glycol  
50% (v/v) 1:1

(Contd. of page 2)

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **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.
- **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 section 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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

CAS: 107-21-1	Ethylene Glycol	30 ppm
---------------	-----------------	--------

- **PAC-2:**

CAS: 107-21-1	Ethylene Glycol	150 ppm
---------------	-----------------	---------

- **PAC-3:**

CAS: 107-21-1	Ethylene Glycol	900 ppm
---------------	-----------------	---------

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** 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:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

(Contd. on page 4)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name: Ethylene Glycol**  
50% (v/v) 1:1

(Contd. of page 3)

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

**CAS: 107-21-1 Ethylene Glycol**

TLV	Short-term value: 10** mg/m <sup>3</sup> , 50* ppm Long-term value: 25* ppm *vapor fraction:**inh. fraction, aerosol only, A4
-----	---

WEEL I (2)

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.

- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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

- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Liquid

**Color:** Clear

- **Odor:** Odorless

- **Odor threshold:** Not determined.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name: Ethylene Glycol**  
50% (v/v) 1:1

(Contd. of page 4)

· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Auto igniting:</b>	410 °C (770 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Ignition temperature:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3.2 Vol %
<b>Upper:</b>	53 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	1.06778 g/cm <sup>3</sup> (8.91062 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Water:</b>	47.4 %
<b>VOC content:</b>	0.00 %
	0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	0.0 %
· <b>Other information</b>	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.

US

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name:** Ethylene Glycol  
50% (v/v) 1:1

(Contd. of page 5)

## 11 Toxicological information

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

· **LD/LC50 values that are relevant for classification:**

**ATE (Acute Toxicity Estimate)**

Oral	LD50	950 mg/kg
------	------	-----------

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior 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 (Self-assessment): slightly hazardous for water

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

· **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 of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name:** Ethylene Glycol  
50% (v/v) 1:1

(Contd. of page 6)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b><br>· DOT, ADN, IMDG, IATA                                     | Not regulated   |
| · <b>UN proper shipping name</b><br>· DOT, ADN, IMDG, IATA                       | Not regulated   |
| · <b>Transport hazard class(es)</b><br>· DOT, ADN, IMDG, IATA<br>· Class         | Not regulated   |
| · <b>Packing group</b><br>· DOT, IMDG, IATA                                      | Not regulated   |
| · <b>Environmental hazards:</b><br>· Marine pollutant:                           | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>Transport/Additional information:</b>                                       |                 |
| · DOT<br>· Remarks:  | Not regulated   |
| · IMDG<br>· Remarks:   | Not regulated   |
| · IATA<br>· Remarks:   | Not regulated   |
| · UN "Model Regulation":   | Not regulated   |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

CAS: 107-21-1 | Ethylene Glycol

· **TSCA (Toxic Substances Control Act):**

Ethylene Glycol

ACTIVE

Water

ACTIVE

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name: Ethylene Glycol**  
50% (v/v) 1:1

(Contd. of page 7)

· **Hazardous Air Pollutants**

CAS: 107-21-1 | Ethylene Glycol

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

CAS: 107-21-1 | Ethylene Glycol

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

CAS: 107-21-1 | Ethylene Glycol

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Ethylene Glycol

· **Hazard statements**

Harmful if swallowed.

Causes skin and eye irritation.

· **Precautionary statements**

Wash thoroughly after handling. Do not touch eyes.

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

Wear protective gloves.

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

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

· **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.

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/10/2024

Reviewed on 06/10/2024

**Trade name: Ethylene Glycol**  
**50% (v/v) 1:1**

(Contd. of page 8)

- **Department issuing SDS:** Environment protection department.
- **Contact:**  
*Date of Preparation / Last Revision:*
- **Date of preparation / last revision**  
*Revision 1.2, 06/10/2024: Reviewed SDS for accuracy. MH/STN  
 06/10/2024 / 1.0*
- **Abbreviations and acronyms:**  
*IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 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)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 VOC: Volatile Organic Compounds (USA, EU)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Acute Toxicity - Oral 4: Acute toxicity – Category 4  
 Skin Irritation 2: Skin corrosion/irritation – Category 2  
 Eye Irritation 2B: Serious eye damage/eye irritation – Category 2B*
- **\* Data compared to the previous version altered.**

US