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

1.1 Product identifier

- Product Name: Thermodynamic Glycol Solution
- Product Part Number: SKU:GLYCOL

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

- Identified uses: Special Liquid For Electric Radiators
- Use advised against: For specific application information consult Technical Data Sheet

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: My Homeware Ltd.
- Address of Supplier: 4B Maguire Ind Estate
219 Torrington Avenue
Coventry CV4 9HN
United Kingdom
- Telephone: +44 (0) 24 7669 5877 Office hours only.
- Email: info@myhomeware.co.uk

1.4 Emergency telephone number

- Emergency Telephone: +44 (0) 24 7669 5877
Monday to Friday - 09:00-17:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Acute Tox. 4
Eye Irrit. 2
STOT RE 2

SAFETY DATA SHEET

2.2 Label elements



- **Signal Word:** Warning
- **Hazard statements:**
 - H302: Harmful if swallowed.
 - H319: Causes serious eye irritation.
 - H373: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
- **Precautionary statements:**
 - P260: Do not breathe vapour/ spray.
 - P264: Wash hands thoroughly after handling.
 - P270: Do not eat, drink, or smoke when using this product.
 - P301 + 312: IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
 - P330: Rinse mouth.
 - P501: Dispose of contents/ container in accordance with local/ national government regulations.

2.3 Other hazards

- **Contains:** Distilled water, 2,2'-Oxybisethanol, Diethylene glycol; ethanediol; ethylene glycol

SECTION 3: Composition/information on ingredients

3.1 Mixtures

- Distilled Water

CAS Number: 7732-18-5
EC Number: 231-791-2

SAFETY DATA SHEET

Version: 1.1
Revision Date: 28.07.2023
www.myhomeware.co.uk

REACH Registration Number: A registration number is not available for this substance as the substance or its uses are exempted from registration. the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Concentration: 85%.
H Statements: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Symbols: none
Categories: none

- **Ethanediol; ethylene glycol**

CAS Number: 107-21-1
EC Number: 203-473-3
REACH Registration Number: 01-2119456816-28-xxxx.
Concentration: 12%.
H Statements: H302, H373.
Symbols: GHS07.
Categories: Acute Tox. 4, STOT RE 2.

- **2,2'-Oxybisethanol, Diethylene glycol**

CAS Number: 111-46-6.
EC Number: 203-872-2.
REACH Registration Number: 01-2119457857-21-xxxx.
Concentration: 2.5%
H Statements: H302.
Symbols: GHS07.
Categories: Acute Tox. 4.

- **Potassium 2-Ethylhexanoate**

CAS Number: 3164-85-0.
EC Number: 221-625-7
REACH Registration Number: 01-2119980714-29-xxxx.
Concentration: 0.5%
H Statements: H315, H318, H361d
Symbols: GHS02, GHS07, GHS09
Categories: Skin Irrit. 2, Eye Dam. 1, Repr. 2.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Inhalation

If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air, keep warm and at rest in a position comfortable for breathing. If breathing stops provide artificial respiration. Keep the affected person warm and at rest. Get prompt medical attention.

- Contact with eyes

Rinse immediately with plenty of water. Remove any contact lenses if easy to do so and open eye lids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

- Contact with skin

Take off contaminated clothing. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, consult always a physician.

- Ingestion

Rinse mouth thoroughly with water. DO NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

- See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment should be symptomatic and directed to relieving any effects.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Extinguishing media: Water spray, alcohol resistant foam, dry extinguishing powder, carbon dioxide. DO NOT USE Strong water jet.

5.2 Special hazards arising from the substance or mixture

- Provide adequate ventilation. Evacuate personnel to a safe area. Hazardous decomposition products COx. Do not allow run-off from fire-fighting to enter drains or water courses.

5.3 Advice for firefighters

- Special protective equipment for firefighters. In case of fire: Wear self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Do not allow run-off from firefighting to enter drains or water courses. Evacuate personnel to a safe area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Evacuate personnel to a safe area. Stay upwind/keep distance from source. Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothing.
- Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2 Environmental precautions

- Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so. Dam up. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone. Keep in suitable, closed containers for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Dispose of contaminated materials in accordance with current regulations.

6.4 Reference to other sections

- See Section 1 for emergency contact information.
- See Section 5 for firefighting measures.
- See Section 8 for information on appropriate personal protective equipment.

SAFETY DATA SHEET

- See Section 12 for environmental precautions.
- See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with combustibles... See also section 10. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Do not allow to enter into surface water or drains. Obtain special instructions before use. (Do not handle until all safety precautions have been read and understood.).
- Keep good industrial hygiene. Wash hands immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Separate working clothes from town clothes. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a dry, cool and well-ventilated place. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity. Bund storage facilities to prevent soil and water pollution in the event of spillage.
- Keep only in the original container.

7.3 Specific end use(s)

- The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Substances

Chemical Name	WEL (short term)	WEL (long term)
ethanediol; ethylene glycol (107-21-1)	40ppm	20ppm
2,2'-Oxybisethanol, Diethylene glycol (111-46-6)	69ppm	23ppm

SAFETY DATA SHEET

8.2 Exposure controls



- Engineering Controls:

Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

- Personal protection:

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Do not eat, drink or smoke when using this product.

- Hand protection:

Wear chemically resistant gloves (tested to EN374) . Suitable material: Nitrile rubber (BTT: >8h, 0,3mm). neoprene gloves (BTT: >8h, 0,3mm). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

- Hygiene measures:

Wash hands after handling. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate hand lotion to prevent defatting and cracking of skin.

- Respiratory protection:

Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment. Full face mask (EN 136). Half-face mask (DIN EN 140). Filter type: ABEK (EN 141).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Liquid.
- Colour: Red/ orange.
- Odour: Characteristic.
- Boiling point/range (°C): >120.
- Flashpoint (°C): >161. (PMCC)
- Freezing point (°C): -4
- Oxidising properties: No data available.
- Partition coefficient (n-Octanol/Water): No data available.
- pH: 7 - 8.
- Relative density (@20°C): 1.06

SAFETY DATA SHEET

Version: 1.1
Revision Date: 28.07.2023
www.myhomeware.co.uk

- Solubility: Miscible with water.
- Vapour pressure (@20°C): 0.06mmHg
- Vapour density: 2.1 (Air =1.0)
- Autoignition temperature (°C): >400.

9.2 Other information

- The figures in this section are for guidance only please always use them in conjunction with the technical data sheet. Information given is applicable to the major ingredient.

SECTION 10: Stability and reactivity

10.1 Reactivity

- Hydrosopic. Reference to other sections: 10.5.

10.2 Chemical stability

- The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

- Reacts vigorously with strong oxidizers and acids. See also section 7. Handling and storage.

10.4 Conditions to avoid

- Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. See also section 7. Handling and storage.

10.5 Incompatible materials

- Keep away from strong acids and oxidizing agents.

10.6 Hazardous decomposition products

- Burning produces noxious and toxic fumes.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: Oral: Harmful if swallowed.
- ATE CLP (oral) 500 mg/kg bodyweight

SAFETY DATA SHEET

Version: 1.1
Revision Date: 28.07.2023
www.myhomeware.co.uk

Distilled Water	
LD50/oral/rat	>90000 mg/kg

Ethanediol; ethylene glycol (107-21-1)	
LD50/oral/rat	7712 mg/kg
LD50/dermal/rat	10600 mg/kg
LD50/dermal/rabbit	> 3500 mg/kg

2,2'-Oxybisethanol, Diethylene glycol (111-46-6)	
LD50/oral/rat	12565 mg/kg
LD50/dermal/rat	11890 mg/kg
LD50/inhalation/rabbit	> 4600 mg/m ³ (exposure time: 4h)

Potassium 2-ethylhexanoate (3164-85-0)	
LD50/oral/rat	2043 mg/kg (OECD 401)
LD50/dermal/rat	> 2000 mg/kg (OECD 402) (24h)

- Serious eye damage/ irritation: Causes eye irritation.
- Germ cell mutagenicity: Not classified (Based on available data, the classification criteria are not met.)
- Carcinogenicity: Not classified (Based on available data, the classification criteria are not met.)
- Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met.)
- Specific target organ toxicity (single exposure): Not classified (Based on available data, the classification criteria are not met.)
- Specific target organ toxicity: May cause damage to organs (kidneys) through (repeated exposure) prolonged or repeated exposure (oral).
- Aspiration hazard: Not classified (Based on available data, the classification criteria are not met.)

- Inhalation

May cause respiratory irritation. The following symptoms may occur: Cough. Dizziness. Headache.

- Contact with eyes

Causes serious eye irritation. The following symptoms may occur: erythema (redness). Pain.

- Contact with skin

May be absorbed through the skin. Repeated exposure may cause skin dryness or cracking.

- Acute and chronic health hazards

May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

SAFETY DATA SHEET

-Ingestion

Harmful if swallowed. Weakness. The following symptoms may occur: Vomiting. Unconsciousness. Abdominal pain. Nausea.

SECTION 12: Ecological information

12.1 Toxicity

- Ecological injuries are not known or expected under normal use.

Ethanediol; ethylene glycol (107-21-1)	
LC50 fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss.)
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna.)
LC50 fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static].)
NOEC (chronic)	15380 mg/l @ 7d Pimephales promelas.

2,2'-Oxybisethanol, Diethylene glycol (111-46-6)	
LC50 fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through].)
EC50 Daphnia 1	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna.)

Potassium 2-ethylhexanoate (3164-85-0)	
LC50 fish 1	> 100 mg/l (OECD 203 - Oryzias latipes.)
EC50 Daphnia 1	106 mg/l (OECD 203) (48h.)
EC50 Daphnia 2	75 mg/l (OECD 211) (21d.)

12.2 Persistence and degradability

- No data available.

12.4 Bioaccumulative potential

- Bioaccumulative potential. No data available.
- Partition coefficient No data available.

12.5 Mobility in soil

- No data available.

12.6 Results of PBT and vPvB assessment

- Not applicable.

12.7 Other adverse effects

-No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Do not allow to enter into surface water or drains. Dispose of empty containers and wastes safely. Safe handling: see section 7. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.

SECTION 14: Transport information

14.1 UN number

- UN No.: Not applicable.

14.2 UN proper shipping name

- Not applicable

14.3 Packing group

- Not applicable.

14.4 Environmental hazards

- Not classified.

14.5 Special precautions for user

- Not applicable.

14.6 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable.

SECTION 15: Regulatory information

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

- Regulation (EC) No 1907/2006 of the European Parliament and the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
- Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

SAFETY DATA SHEET

Version: 1.1
Revision Date: 28.07.2023
www.myhomeware.co.uk

15.2 Chemical safety assessment

- A chemical safety assessment (CSA) for this product has not yet been completed.

SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet: H302: Harmful if swallowed, H315: Causes skin irritation, H318: Causes serious eye damage, H319: Causes serious eye irritation, H361d: Suspected of damaging the unborn child, H373: May cause damage to organs through prolonged or repeated exposure.

Disclaimer:

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.