

# SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

## EarthCare Glycol E

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### SECTION 1. Identification of the substance/mixture and of the company

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**1.1 Product identifier** EarthCare Glycol E

**1.2 Relevant identified uses of the product and uses advised against**

**Intended use:** Includes concentrations 15-95%  
Industrial use  
As a coolant

**1.3 Details of the supplier of the safety data sheet**

**Manufacturer:** Recyctec AB  
**Postal address:** Monomarken 30  
556 50 Jönköping  
**Contact person:** Sverige  
**Tel.:** +46 (0)10 209 00 28  
**E-mail:** info@recyctec.se  
**Webpage:** www.recyctec.se

**1.4 Telephone emergency number:**

In case of emergency, contact toxicological information, emergency tel 112.  
For non-emergency poison information, see:  
[http://www.who.int/gho/phe/chemical\\_safety/poisons\\_centres/en/](http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/)

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### SECTION 2. Hazards identification

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**2.1 Classification of the substance or mixture**

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

Acute toxicity (Category 4), H302

**2.2 Label elements**

**Classification according to regulation (EC) No. 1272/2008 (CLP)**

**Pictogram(s)**



**Signal word** Warning

## Hazard statements

H302 Harmful if swallowed.

## Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/ spray.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P314 Get medical advice/attention if you feel unwell.  
P330 Rinse mouth.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

## Additional information

Contains Ethanediol

### 2.3 Other hazards

The substances do not contain any substances that are considered to be a PBT or vPvB substance according to Regulation (EC) No. 1907/2006, Annex XIII.

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## SECTION 3. Composition/information on ingredients

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### 3.2 Mixtures

#### Declaration of components according to Regulation (EC) No. 1272/2008

Chemical name	CAS No. EC No.	REACH Reg. No. Index No.	Conc. %	Classification
Ethanediol	107-21-1 203-473-3	01-2119456816-28 603-027-00-1	15-95	Acute tox. 4; H302

GHS-HC: harmonized classification (classification of the substance according to the description in 1272/2008 / EC, Annex VI)  
IOELV: substance with a jointly indicative occupational exposure limit value for chemical agents

For full text of the H-statements see section 16 "Other information". All percentages are by weight unless otherwise indicated

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## SECTION 4. First aid measures

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### 4.1 Description of first aid measures

**General:** Do not leave the victim unattended. Remove the victim from the danger zone. In case of unconsciousness use side position and do not give anything by mouth. Take off all contaminated clothing immediately. In case of discomfort or uncertainty, consult a doctor.

- Inhalation:** Provide fresh air. In case of irregular breathing or respiratory condition seek medical attention immediately and give first aid. In case of respiratory irritation, seek medical advice.
- Skin contact:** Wash with plenty of soap and water. In case of skin irritation or rash: Seek medical attention.
- Eye contact:** Keep eyelids open and rinse for at least 15 minutes with clean running water. Remove contact lenses if possible. Continue rinsing. Contact the POISON CENTER / doctor in case of irritation.
- Ingestion:** If swallowed, rinse mouth with water (only if the person is conscious). Give plenty of water to drink in small sips (diluting effect). DO NOT induce vomiting. In case of discomfort, contact POISON CENTER or doctor / physician.

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

Impaired renal function.

#### 4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice: doctors should contact the Poison Information Center.

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## SECTION 5. Firefighting measures

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### 5.1 Extinguishing media

**Suitable extinguishing media:** Alcohol-resistant foam; Dry extinguishing powder; Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media:** Water with a full water jet.

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous decomposition products

Carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>).

### 5.3 Advice to firefighters

Avoid breathing smoke in case of fire or explosion. Adapt the fire-fighting measures to the surroundings. Fire-fighting water must not end up in sewage or stormwater. Separate collection of contaminated fire extinguishing water. Fight the fire in the usual way at a proper distance.

#### Special protective equipment for firefighters

Compressed air device (EN 133). Standard protective clothing for firefighters

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## SECTION 6. Accidental release measures

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### 6.1 Personal precautions, protective equipment and emergency procedures

#### For personnel other than rescue personnel

Move people to safety. Ventilate the affected area.

#### For rescue workers

When exposing vapors, dusts, sprays or gases use respirator. Use prescribed personal protective equipment.

### 6.2 Environmental precautions

Prevent the product from reaching drains and surface and groundwater. Contaminated washing water must be collected and disposed of in a safe manner.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain spills

Drainage cover.

#### Instructions for cleaning up after spills

Wipe up with absorbent material (eg cloth, fleece).

#### Suitable containment technology

Use of absorbent material.

#### Additional information regarding spills and emissions

Leave for recycling in suitable containers. Ventilate the affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

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## SECTION 7. Handling and storage

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### 7.1 Precautions for safe handling

#### Recommendations

Measures to prevent fire and prevent the formation of aerosols and dust

Use local and general ventilation. Provide good ventilation.

#### General advice on hygiene in the workplace

Wash hands after use. Do not eat, drink or smoke when using the product. Remove contaminated clothing and protective equipment before entering an area where meals are being eaten. Store food away from chemicals. Never place chemicals in containers normally used for food or drink. Store away from food and feed.

### 7.2 Conditions for safe storage, including any incompatibilities

Management of risks associated with

- incompatible substances or mixtures

Store away from alkalis, oxidizing agents, acids.

Limitation of the effects

Do not expose to high temperatures. UV radiation / sunlight.

Consideration of other advice

Store in a well-ventilated place. The container must be tightly closed.

### 7.3 Specific end use(s)

No further relevant information available.

## SECTION 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

The national occupational exposure limit values that correspond to Union occupational exposure limit values in accordance with Directive 98/24/EC, including any notations as referred to in Article 2(3) of Commission Decision 2014/113/EU(5);

Country	Substances	ppm	mg/m <sup>3</sup>	Interval	Category	Notes	Source
EU	Ethylene glycol CAS 107-21-1	20	52		NGV		2000/39/ EG
EU	Ethylene glycol CAS 107-21-1	40	104		KGV		2000/39/ EG

**KGV** limit value for short-term exposure: A limit value above which exposure should not occur and which applies to a period of 15 minutes (unless otherwise stated)

**NGV** time-weighted mean value (limit value for short-term exposure): Measured or calculated in relation to a reference period of eight hours time-weighted average (unless otherwise stated)

Relevant DNELs of constituents of the mixture						
Name of the substance	CAS-nr	Endpoint	Limit	Protective target, route of exposure	Use within	Exposure time
ethanediol	107-21-1	DNEL	35 mg/m <sup>3</sup>	Human, by inhalation	Workers (industry)	chronic - local effects
ethanediol	107-21-1	DNEL	106 mg/kg	human, dermal	Workers (industry)	chronic - systemic effects
Name of the substance	CAS-nr	Endpoint	Limit	Protective target, route of exposure	Use within	Exposure time
ethanediol	107-21-1	DNEL	7 mg/m <sup>3</sup>	Human, by inhalation	consumer (private households)	chronic - local effects

ethanediol	107-21-1	DNEL	53 mg/kg	human, dermal	consumer (private households)	chronic - systemic effects
Relevant PNECs of constituents of the mixture						
Name of the substance	CAS-nr	Endpoint	Limit	Organism	Part of the environment	Exposure time
ethanediol	107-21-1	PNEC	10 mg/l	aquatic organisms	freshwater	brief (one-time offense)
Relevant PNECs of constituents of the mixture						
Name of substance	CAS-nr	Endpoint	Limit	Organism	Part of the environment	Exposure time
ethanediol	107-21-1	PNEC	1 mg/l	aquatic organisms	marine water	brief (one-time offense)
ethanediol	107-21-1	PNEC	199,5 mg/l	aquatic organisms	sewage treatment plant (STP)	brief (one-time offense)
ethanediol	107-21-1	PNEC	37 mg/kg	aquatic organisms	sediment in fresh water	brief (one-time offense)
ethanediol	107-21-1	PNEC	3,7 mg/kg	aquatic organisms	sediment in sea water	brief (one-time offense)
ethanediol	107-21-1	PNEC	1,53 mg/kg	terrestrial organisms	earth	brief (one-time offense)
ethanediol	107-21-1	PNEC	10 mg/l	aquatic organisms	water	periodic release

## 8.2 Exposure control

Assigned personal protection equipment is a guideline. A risk assessment of actual risks may lead to other requirements.

### 8.2.1 Engineering controls

Use local and general ventilation.

## 8.2.2 Personal protection

Do not eat, drink or smoke when using this product. Wash hands after handling. Use skin lotion or cream to prevent dryness of the skin.

### 8.2.2.1 Eye protection

Basket glasses with side protection (EN 166).

### 8.2.2.2 Hand protection

Wear suitable protective gloves. Before use, check the tightness / resistance to permeation. For special uses it is recommended to check the resistance to permeation of chemicals with the manufacturer of the above protective gloves. Suitably, chemical gloves are tested according to EN 374. The choice of a suitable glove depends not only on the material but also on other quality criteria and varies from one manufacturer to the next. As the product is prepared from several materials, the durability of the glove material cannot be predicted and must therefore be checked before use.

Type of material: Nitrile rubber.

### Skin protection

Protective clothing (EN 340).

### 8.2.2.3 Respiratory protection

Use respiratory protection in case of insufficient ventilation. Type: A-P2 combined filter for particulates and organic gases and vapors, color code: Brown / White): for heating, industrial spraying.

### 8.2.2.4 Thermal hazard

No further relevant information available.

## 8.3 Environmental exposure control

Store in a suitable way to avoid environmental pollution. Prevent the product from reaching drains and surface and groundwater.

# SECTION 9. Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

<b>a</b>	<b>Physical state</b>	Liquid
<b>b</b>	<b>Color</b>	Colorless
<b>c</b>	<b>Odor/odor threshold</b>	Characteristic
<b>d</b>	<b>Melting point/Freezing point</b>	< -16 °C
<b>e</b>	<b>Initial boiling point/boiling range</b>	>150 °C at 1.013 hPa
<b>f</b>	<b>Flammability (solid, gas)</b>	No data available/not applicable
<b>g</b>	<b>Lower and upper explosion limit</b>	No data available/not applicable
<b>h</b>	<b>Flash point</b>	>100 °C at 1.013 mbar
<b>i</b>	<b>Auto-ignition temperature</b>	>200 °C
<b>j</b>	<b>Decomposition temperature</b>	No data available/not applicable
<b>k</b>	<b>pH</b>	7-9
<b>l</b>	<b>Kinematic viscosity</b>	No data available/not applicable
<b>m</b>	<b>Solubility</b>	1000 g/l at 20 °C

n	Partition coefficient (n-octanol/water)	-1,36
o	Vapor pressure	0,008-0,02 hPa at 20 °C
p	Density and/or relative density	1,1-1,13 g/cm <sup>3</sup> at 20 °C and >2 at 20 °C (air = 1)
q	Relative vapor density	No data available/not applicable
r	Particle characteristics	No data available/not applicable

## 9.2 Other information

No data available/not applicable

## SECTION 10. Stability and reactivity

### 10.1 Reactivity

The material is not reactive under normal conditions of application.

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

### 10.4 Conditions to avoid

There are no specific conditions to avoid.

### 10.5 Incompatible materials

Oxidizing agents.

### 10.6 Hazardous decomposition products

There are no known hazardous decomposition products that can reasonably be expected as a result of use, storage, spillage and heating. Hazardous combustion products: see section 5.

## SECTION 11. Toxicological information

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

No toxicological tests have been performed on the product.

#### Classification procedure

The method for classifying the mixture is based on the constituents (addition formula).

Estimated value of ATE:

Route of exposure	ATE
Oral	About 500 mg/kg

- acute toxicity of constituents of the mixture



Acute toxicity (ATE) estimation of components of the mixture			
Name of the substance	CAS-nr	Route of exposure	ATE
ethanediol	107-21-1	oral	500 mg/kg

### General toxicological information

Acute toxicity of constituents of the mixture

Name of the substance	CAS-nr	Route of exposure	Endpoint	Value	Species
ethanediol	107-21-1	oral	LD50	7.712 mg/kg	rat

### Classification according to GHS (1272/2008/EC, CLP)

<b>Acute toxicity:</b>	Harmful if swallowed.
<b>Skin corrosion/irritation:</b>	Not classified
<b>Serious eye damage/eye irritation:</b>	Not classified
<b>Respiratory or skin sensitization:</b>	Not classified
<b>Germ cell mutagenicity:</b>	Not classified
<b>Carcinogenicity:</b>	Not classified
<b>Reproductive toxicity:</b>	Not classified
<b>STOT – single exposure:</b>	Not classified
<b>STOT – repeated exposure:</b>	Not classified
<b>Aspiration hazard:</b>	Not classified

### 11.2 Information on other hazards

No further relevant information available.

## SECTION 12. Ecological information

### 12.1 Toxicity

Is not classified as dangerous for the aquatic environment.

Toxicity (acute) to the aquatic environment of constituents of mixture					
Name of the substance	CAS-nr	Endpoint	Value	Species	Exposure time
ethanediol	107-21-1	LC50	72.860 mg/l	fish	96 h
ethanediol	107-21-1	EC50	>100 mg/l	water invertebrates	48 h

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

No data available.

### 12.5 Results of PBT and vPvB assessment

The substance/mixture does not fulfil the criteria to be identified as PBT substance or vPvB substance.

### 12.6 Endocrine disrupted properties

No further relevant information available.

### 12.7 Other adverse effects

No data available.

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## SECTION 13. Disposal considerations

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### 13.1 Waste treatment methods

Dispose according to Directive 2008/98/EC on waste (Waste Framework Directive) and in compliance with local and national legislation. Do not allow to enter sewers. Transfer to a waste container and send for destruction.

Packaging may still contain hazardous residues and disposal should be undertaken by a licensed waste contractor. Any disposal practice must be in compliance with local and national laws and regulations.

Relevant information on wastewater diversion

Do not empty into drains. Avoid release to the environment. Organic waste containing dangerous substances.

*Opportunity for reuse or recycling: Recyctec AB.*

Waste treatment of containers / packaging

Completely emptied packaging can be recycled. Contaminated packaging is treated as the substance itself.

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## SECTION 14. Transport information

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Not classified as dangerous goods.

### 14.1 UN number

ADR	-
RID	-
IMDG	-
ICAO/IATA	-

#### 14.2 UN proper shipping name

ADR	-
RID	-
IMDG	-
ICAO/IATA	-

#### 14.3 Transport hazard class(es)

ADR	-
Hazard no.	-
RID	-
ADN	-
IMDG	-
ICAO/IATA	-

#### 14.4 Packaging group

ADR	-
RID	-
IMDG	-
ICAO/IATA	-

#### 14.5 Environmental hazards

ADR	-
RID	-
IMDG	-
ICAO/IATA	-

#### 14.6 Special precautions for user

Tunnel restriction code	-
Limited quantities, ADR	-

#### 14.7 Maritime transport in bulk according to IMO instruments.

Not applicable

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## SECTION 15. Regulatory information

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

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.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Hazardous substances with restrictions (REACH, Annex XVII)			
Name of substance	Name acc. list	CAS-nr	Nr
EARTHCARE ETHYLENE GLYCOL 25 – 95 %	this product meets the criteria for classification according to Regulation No 1272/2008 / EU		3

**List of substances for which authorization is required (REACH, Annex XIV) / SVHC - candidate list**

No ingredient is listed

**Seveso-directive**

2012/18/EU (Seveso III)		
Hazardous substance / hazard categories	Thresholds (in tonnes) for the application of requirements for lower and higher levels	Remarks
not assigned		

**Regulation 166/2006 / EC establishing a European Pollutant Release and Transfer Register (PRTR)**

No ingredient is listed.

**Directive 2000/60 / EC establishing a framework for Community action in the field of water policy (WFD)**

No ingredient is listed.

**Regulation 98/2013 / EU on the marketing and use of explosives precursors**

No ingredient is listed.

**15.2 Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

**SECTION 16. Other information**

**Revision summary**

**Information about changes (revision of the safety data sheet)**

Version no 1.0:

**Explanations to abbreviations in Section 14**

ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
RID	Règlement concernant le transport international ferroviaire de marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by rail)
IMDG	IMDG code (International Maritime Dangerous Goods Code)
ICAO	International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)
IATA	International Air Transport Association

## Abbreviations

Abbreviation	Description of abbreviations used
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations, see IATA/DGR
DMEL	Derived Minimum Effect Level
DNEL	Derived No-Effect Level
Abbreviation	Description of abbreviations used
EC50	Effective Concentration 50 %. The EC50 value corresponds to the concentration of a tested substance that gives a 50% response change (eg of growth) over a certain time interval
EG-nr	The EC inventory includes three combined European lists of substances from previous EU chemicals legislation: EINECS, ELINCS and the NLP list
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: with this method the test concentration which is estimated to cause 50% inhibition of either growth (EbC50) or growth rate (ErC50), relative to the control
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals"
HGV	Hygienic limit value
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Good Code
Indexnr	The index number is the identification number given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit values
KTV	Short-term value
LC50	Lethal Concentration 50 % (lethal concentration 50%): The LC50 value corresponds to the concentration of a tested substance which gives 50% mortality over a given time interval

LD50	Lethal Dose 50 % (lethal dose 50%): The LD50 value corresponds to the dose of a tested substance that gives 50% mortality over a certain time interval
LOEC	Lowest Observed Effect Concentration
MARPOL	International Convention for the Prevention of Pollution from Ships (Marine Pollutant)
NGV	Level limit value
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Long-lived, bioaccumulative and toxic substance
PNEC	Predicted No-Effect Concentration
ppm	Million parts
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses
SVHC	Substance of Very High Concern
vPvB	Very Persistent and very Bioaccumulative

### References to important literature and data sources

Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.  
Regulation (EC) No 1907/2006 (REACH), as amended by 2015/830 / EU.

Transport of dangerous goods by road, rail or inland waterway (ADR / RID / ADN). International Code for the Carriage of Dangerous Goods by Ship (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA) (regulations for the air transport of dangerous goods).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixtures.

Health hazards, Environmental hazards: The method for classification of the mixture is based on the ingredients (addition formula).

### List of relevant phrases (code and wording given in Chapters 2 and 3)

Code	Text
H302	Harmful if swallowed

### Disclaimer

This information is based on the current state of knowledge. This Safety Data Sheet has been compiled for, and is intended for, this product only.

This safety data sheet has been produced and reviewed by Chemgroup Scandinavia AB.