



**S a f e t y   D a t a   S h e e t**  
According to Regulation (EC) 1907/2006  
and (EU) 453/2010

**1316 Ethylene Glycol**

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

**1.1 Product identifier**

Name:

Ethylene Glycol

**Synonym:**

1,2-Dioxyethane, 1,2-Ethanediol, Glycol

**CAS:** [107-21-1]

**REACH Registration Number:** 01-2119456816-28-XXXX

**1.2 Relevant identified uses of the substance or mixture:**

For laboratory utilisation, analysis, research and fine chemistry.

**1.3 Identification of the company or firm:**

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: [product.safety@panreac.com](mailto:product.safety@panreac.com)

**1.4 Emergency telephone:**

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

**2. Identification of dangers**

**2.1 Classification of the substance or the mixture.**

**Classification Regulation (CE) nº 1272/2008.**

Acute Tox. 4

**Classification (67/548/CEE or 1999/45/CE).**

**Xn** Harmful

R22

## **2.2 Label elements:**

### **Hazard Pictograms**



### **Signal word**

Warning

### **Hazard statements**

H302 Harmful if swallowed.

### **Precautionary statements**

P264 Wash...thoroughly after handling.

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

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

P330 Rinse mouth.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

For the full text of the R-phrases mentioned in this section, see section 16.

## **2.3 Other hazards:**

No further relevant information available.

## **3. Composition/information on ingredients**

Name: Ethylene Glycol

Formula: CH<sub>2</sub>OHCH<sub>2</sub>OH M.= 62,07 CAS [107-21-1]

EC number (EINECS): 203-473-3

EC index number: 603-027-00-1

REACH Registration Number: 01-2119456816-28-XXXX

## **4. First aid measures**

### **4.1 General indications:**

Never provide drink or induce vomiting in the event of loss of consciousness.

#### **4.2 Inhaling:**

Take the person out into the fresh air. In the event of suffocation, proceed to provide artificial respiration.

#### **4.3 Contact with the skin:**

Wash with plenty of water. Remove contaminated clothing.

#### **4.4 Eyes:**

Wash with plenty of water, keeping eyelids open. In the event of irritation, seek medical assistance.

#### **4.5 Swallowing:**

Induce vomiting. Call for medical help. Stomach lavage.

### **5. Firefighting measures**

#### **5.1 Suitable extinguishing media:**

Water. Carbon dioxide (CO<sub>2</sub>). Alcohol resistant foam. Dry powder.

#### **5.2 Unsuitable extinguishing media:**

No specific data.

#### **5.3 Special hazards arising from the substance or mixture:**

Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Auf Rückzündung achten In the event of fire, toxic fumes may form.

#### **5.4 Advice for firefighters:**

Suitable clothing and footwear.

### **6. Accidental release measures**

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

Do not inhale the fumes.

#### **6.2 Environmental precautions:**

Avoid pollution of the soil, water supplies and drains.

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

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

### **7. Handling and storage**

#### **7.1 Precautions for safe handling:**

No special indications.

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

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat.

**Recommended storage temperature:** Room temperature.

### **8. Exposure controls/personal protection**

**8.1 Exposure controls:**

No special indications.

**8.2 Control parameters:**

VLA-EC: 40 ppm = 104 mg/m<sup>3</sup> dermal resorption VLA-ED: 20 ppm = 52 mg/m<sup>3</sup> dermal resorption

**8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection.

**8.4 Hand protection:**

Use suitable gloves latex neopren nitrile PVC

**8.5 Eye/face protection:**

Use safety glasses.

**8.6 Individual hygiene measures:**

Remove contaminated clothing. Use suitable work clothing. Wash hands and face before breaks and when the job is done.

**8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

**9. Physical and chemical properties**

Appearance: liquid

Colour: Colourless

Granulometry: N/A

Odour: Odourless.

pH:

N/A

Melting point/freezing point: -12 °C

Initial boiling point and boiling range: 198 °C

Flash point: 111 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: 15,3 %(V) / 3,2 %(V)

Vapour pressure: 0,06 hPa (20 °C)

Vapour density: N/A

Relative density:

Insertar Aquí Grupo de repetición

(20/4) 1,114 g/ml

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature: 410 °C

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity:

N/A

**10. Stability and reactivity**

**10.1 Conditions to avoid:**

The product is chemically stable under standar ambient conditions (room temperature).

**10.2 Incompatible materials:**

Aluminium. Chromyl chloride. Alkaline hydroxides. Perchloric acid. Strong oxidant agents.

**10.3 Hazardous decomposition products:**

No specific data.

**10.4 Chemical stability:**

Hygroscopic. The gases/fumes can form explosive mixtures with the air.

**11. Toxicological information****11.1 Acute toxicity:**

LD L0 oral man : 398 mg/kg

LD L0 oral hmn : 786 mg/kg

LD50 oral rat : 4.700 mg/kg

LD50 skn rbt : 9.530 mg/kg

TC L0 inh man : 10000 mg/m3

**11.2 Dangerous effects for health:**

Upon contact with the skin: irritations Risk of cutaneous absorption. Through contact with the eyes: irritations If swallowed: anxiety effects on the central nervous system Systemic effects: After a period of latency: tiredness ataxia (motor coordination disorders) loss of consciousness kidney problems Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

**12. Environmental information**

### **12.1 Toxicity:**

#### **- EC50 test (mg/l):**

Protozoa (*E. sulcatum*) EC0 >10000 mg/l

Classification: Toxic or hardly toxic

Crustaceans (*Daphnia magna*) 10000 mg/l

Classification: Toxic or hardly toxic

Fish (*C. auratus*) 5000 mg/l

Classification:

Toxic

Water organisms

Classification: Highly toxic

Bacteria (*Photobacterium phosphoreum*) 650 mg/l

Classification:

Highly toxic

Bacteria (*Ps. putida*) EC0 10000 mg/l

Classification:

Toxic or hardly toxic

Algae (*Sc. quadricauda*) EC0 >10000 mg/l

Classification: Toxic or hardly toxic

#### **- Receptor medium:**

Risk for the water environment

Low

Risk for the land environment

Low

#### **- Observations:**

Non-ecotoxic compound if the dumping concentration is not very high.

### **12.2 Persistence and Degradability :**

#### **- Test:**

BOD5 = 0,81g/g DBOD38D% ThOD/5d

COD = 1,29 g/g

#### **- Biotic degradation classification:**

ThOD 1,26 g/g

BOD5/COD

Biodegradability

High, over 1/3

#### **- Abiotic degradation depending on pH:**

#### **- Observations:**

Easily biodegradable product.

### **12.3 Bioaccumulative potential:**

#### **- Test:**

#### **- Bioaccumulation:**

Risk

#### **- Observations:**

Non-bioaccumulable product.

### **12.4 Mobility in soil :**

Data not available.

### **12.5 Assessment PBT and MPMB :**

Data not available.

### **12.6 Other adverse effects:**

If suitable handling conditions are maintained, no ecological problems are to be anticipated.

## **13. Disposal considerations**

### **13.1 Waste treatment methods:**

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

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### **13.2 Contaminated containers:**

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

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## **14. Transport information**

Not classified as dangerous in the meaning of transport regulations.

## **15. Regulatory information**

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

## **16. Other information**

### **Other precautionary statements**

### **Labelling (65/548/CEE or 1999/45/CE)**

R-phrase(s):     **R22** Harmful if swallowed.

S-phrase(s):

Version and revision date : 4 15.09.2011

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In respect of the previous review, changes have been made to the following sections: 15

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.