

Safety Data Sheet
According to Regulation (EC) 1907/2006



2551 Diethyl Ether *stabilized with ethanol

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

Diethyl Ether *stabilized with ethanol

Synonym:

1,1'-Oxibisethane, Diethyl Ether, Ethoxyethane, Ethyl Ether, Ethyl Oxide, Sulphuric Ether

REACH Registration Number: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

1.2 Use of the substance/preparation:

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

1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

2. Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) n° 1272/2008.

Flam. Liq. 1

Acute Tox. 4

STOT SE 3

Hazard Pictograms



Signal word

Danger

Hazard statements

H224 Extremely flammable liquid and vapour.

EUH019 May form explosive peroxides.

H302 Harmful if swallowed.

EUH066 Repeated exposure may cause skin dryness or cracking.

H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 Use only non-sparking tools.

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

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

Xn Harmful

F+ Extremely flammable

R66

R22

R19

R12

R67

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

3. Component Composition/Information

Name: Diethyl Ether *stabilized with ethanol

Formula: $C_2H_5OC_2H_5$ M.= 74,12 CAS [60-29-7]

EC number (EINECS): 200-467-2

EC index number: 603-022-00-4

4. First aid**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. Loosen clothing to release respiratory channels.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek medical assistance.

4.5 Swallowing:

Avoid vomiting. Seek medical assistance. Administer Vaseline oil as a laxative (3 ml/kg).

5. Fire-fighting means**5.1 Suitable fire-extinguishing means:**

Dry powder. Foam.

5.2 Fire-fighting means which must NOT be used:

No specific data.

5.3 Special risks:

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

5.4 Protective equipment:

Suitable clothing and footwear.

6. Measures to be taken in the event of accidental spillage**6.1 Individual precautions:**

Do not inhale the fumes.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

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.

7. Handling and storage**7.1 Handling:**

Avoid the formation of electrostatic charges.

7.2 Storage:

Well sealed containers. In a cool, dry place, away from light and well ventilated. Away from sources of ignition and heat. Room temperature.

8. Staff exposure/protection controls**8.1 Technical protective measures:**

Ensure good ventilation and renewal of the air in the premises.

8.2 Exposure limit control:

VLA-EC: 200 ppm - 1.540 mg/m³

VLA-ED: 100 ppm - 1.230 mg/m³

8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter AX. Filter P3.

8.4 Hand protection:

Use suitable gloves

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use suitable work clothing. Wash hands 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: Characteristic.

pH:

N/A

Melting point/freezing point: -116 °C

Initial boiling point and boiling range: 34,6 °C

Flash point: - 40 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: 36 %(V) / 1,7 %(V)

Vapour pressure: 587 hPa (20 °C)

Vapour density: N/A

Relative density: (20/4) 0,71

Solubility: 69 g/l in water 20 °C

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Viscosity: N/A

10. Stability and reactivity**10.1 Conditions which should be avoided:**

High temperatures.

10.2 Matter which should be avoided:

Oxidant agents (amongst others: perchloric acid, perchlorates, halogenates, CrO₃, halogen oxides, nitric acid, nitrogen oxides, non-metal oxides, chromo-sulphuric acid). Halogens. Halogen halides. Non-metals. Non-metal oxyhalides. Oils of turpentine and by-products. Chromyl chloride. Metal chlorides. Nitrates.

10.3 Hazardous decomposition products:

Peroxides.

10.4 Complementary information:

Exposure to light and air encourages the formation of peroxides. The gases/fumes can form explosive mixtures with the air.

11. Toxicological information

11.1 Acute toxicity:

LD L0 oral man : 260 mg/kg

LD50 oral rat : 1.215 mg/kg

LC50 inh rat : 73000 ppm 2h

11.2 Dangerous effects for health:

If swallowed and inhaled: Irritations to the mucosae euphoria intoxication ataxia (motor coordination disorders) loss of consciousness coma Risk of aspiration upon vomiting. The following cannot be ruled out: death Prolonged exposure causes constipation loss of appetite allergic reaction dermatitis Can have a demoisturizing effect on the skin, with the risk of secondary infection.

12. Environmental information

12.1 Toxicity:

12.1.1 - EC50 test (mg/l):

Bacteria (Photobacterium phosphoreum) 5623 mg/l

Classification:

Very toxic

Fish 2840 mg/l

Classification:

Very toxic

12.1.2. - Receptor medium:

Risk for the water environment

Low

Risk for the land environment

Low

12.1.3. - Observations:

Ecotoxicity in line with the dumping concentration.

12.2 Persistence and Degradability :

12.2.1 - Test:

12.2.2. - Biotic degradation classification:

BOD5/COD

Biodegradability

High, over 1/3

12.2.3. - Abiotic degradation depending on pH:

12.2.4. - Observations:

Biodegradable product.

12.3 Bioaccumulative potential:

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

Non-bioaccumulable product.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other possible effects on the environment:

Non-pollutant product.

Highly purifiable.

13. Considerations regarding elimination

13.1 Substance or preparation:

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. Information concerning transport

Overland (ADR):

Technical name: DIETHYL ETHER (ETHYL ETHER)

UN 1155 Class: 3 Packaging group: I (D/E)

By sea (IMDG):

Technical name: DIETHYL ETHER (ETHYL ETHER)

UN 1155 Class: 3 Packaging group: I

By air (ICAI-IATA):

Technical name: Diethyl ether

UN 1155 Class: 3 Packaging group: I

Packaging instructions: CAO 361 PAX 351

15. Regulatory information

The substance is subject to Regulation (EC) No 273/2004 of the European Parliament and of the Council, of 11 February 2004 on drug precursors, Council Regulation (EC) No 111/2005 of 22 December 2004 laying down rules for the monitoring of trade between the Community and third countries in drug precursors, Commission Regulation (EC) No 1277/2005 of 27 July 2005 laying down implementing rules for Regulation (EC) No 273/2004 of the European Parliament and of the Council on drug precursors and for Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors.

16. Other information

Other precautionary statements

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash...thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P370+P378 In case of fire: Use for extinction.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

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

R-phrases(s):	R66 Repeated exposure may cause skin dryness or cracking. R22 Harmful if swallowed. R19 May form explosive peroxides. R12 Extremely flammable. R67 Vapours may cause drowsiness and dizziness.
S-phrases(s):	S33 Take precautionary measures against static discharges. S29 Do not empty into drains. S16 Keep away from sources of ignition - No smoking. S9 Keep container in a well-ventilated place.

Review number and date: 4 15.09.2011

Date published: 15.09.2011

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.