



## Safety Data Sheet

### According to Regulation (EU) 830/2015

## 2770 Diethyl Ether \*stabilized with ~6 ppm of BHT

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

#### 1.1 Product identifier

Name:

Diethyl Ether \*stabilized with ~6 ppm of BHT

#### Synonym:

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

**REACH Registration Number:** 01-2119535785-29-XXXX

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

Exposure Scenarios	Main user groups principaux	Sectors of use (SU)	Chemical Product Category (PC)	Process Categories (PROC)	Substances in articles (AC)	Environmental Release Categories (ERC)
Manufacture or use as reaction or extraction solvent	Manufacture Industrial.	SU 3		PROC 1		ERC 1
		SU 8		PROC 2		ERC 4
		SU 9		PROC 3		
				PROC 8a		
				PROC 8b		
Distribution of Substance.	Manufacture Industrial.	SU 3		PROC 15		
		SU 8		PROC 1		ERC 1
		SU 9		PROC 2		ERC 2
				PROC 3		
				PROC 4		
Manufacture of smokeless gunpowder	End use Professional	SU 22		PROC 8a		
				PROC 8b		
				PROC 9		
				PROC 15		
				PROC 1		ERC 8d
Use as laboratory chemicals.	Formulation Industrial.	SU 3		PROC 3		
				PROC 5		
				PROC 8a		
				PROC 8b		
				PROC 10		ERC 2
Use as laboratory chemicals.	End use Professional	SU 22		PROC 15		ERC 4
				PROC 10		ERC 8a
				PROC 15		

### 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)

## 2. Identification of dangers

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

Flam. Liq. 1  
Acute Tox. 4  
STOT SE 3

### 2.2 Label elements:

#### Hazard Pictograms



#### Signal word

##### Hazard statements

H224 Extremely flammable liquid and vapour.  
H302 Harmful if swallowed.  
H336 May cause drowsiness or dizziness.  
EUH019 May form explosive peroxides.  
EUH066 Repeated exposure may cause skin dryness or cracking.

##### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing dust, fume, gas, mist, vapours or spray.  
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.

### **2.3 Other hazards:**

No further relevant information available.

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

### **3.1 Substances**

Name: Diethyl Ether \*stabilized with ~6 ppm of BHT  
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  
REACH Registration Number: 01-2119535785-29-XXXX

### **3.2 Mixtures**

## **4. First aid measures**

### **4.1 Description of first aid measures**

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

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

No further relevant information available.

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

#### **Swallowing:**

Do not induce vomiting. Call for medical help. Administer Vaseline oil as a laxative (3 ml/kg).

#### **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.

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

Wash with plenty of water. Remove contaminated clothing.

#### **Eyes:**

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

## **5. Firefighting measures**

### **5.1 Extinguishing media:**

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

### **5.2 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. In the event of fire, toxic fumes may form.

### **5.3 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:**

Do not allow it to enter the drainage system. 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.

### **6.4 Reference to other sections**

Not applicable

## **7. Handling and storage**

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

Avoid the formation of electrostatic charges.

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

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

**Recommended storage temperature:** Room temperature.

### **7.3 Specific end use(s)**

No more relevant data available

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

### **8.1 Control parameters:**

VLA-EC: 200 ppm = 1.540 mg/m<sup>3</sup> VLA-ED: 100 ppm = 1.230 mg/m<sup>3</sup>

### **8.2 Exposure controls**

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

Respiratory protection:

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

Hand protection:

Use suitable gloves (nitrile).

Eye/face protection:

Use safety glasses.

Individual hygiene measures:

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

Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

## **9. Physical and chemical properties**

### **9.1 Information on basic 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 g/ml

Solubility: 69 g/l in water ( 20 °C )

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity: 0,23 mPa.s (20 °C)

### **9.2 Other information**

No more relevant data available

## **10. Stability and reactivity**

### **10.1 Reactivity**

No specific data.

### **10.2 Chemical stability:**

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

### **10.3 Possibility of hazardous reactions**

No specific data.

### **10.4 Conditions to avoid:**

High temperatures.

### **10.5 Incompatible materials:**

Oxidant agents (amongst others: perchloric acid, perchlorates, halogenates, CrO<sub>3</sub>, 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.

### **10.6 Hazardous decomposition products:**

Peroxides.

## **11. Toxicological information**

### **11.1 Information on toxicological effects**

Acute toxicity:

LD L0 oral man : 260 mg/kg

LD50 oral rat : 1.215 mg/kg

LC50 inh rat : 73000 ppm 2h

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:**

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

Bacteria (Photobacterium phosphoreum) 5623 mg/l

Classification:

Very toxic

Fish 2840 mg/l

Classification:

Very toxic

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

Risk for the water environment

Low

Risk for the land environment

Low

#### **- Observations:**

Ecotoxicity in line with the dumping concentration.

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

#### **- Test:**

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

BOD5/COD

Biodegradability

High, over 1/3

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

#### **- Observations:**

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:**

Non-pollutant product.

Highly purifiable.

## **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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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**

### **14.1 UN number**

UN1155

### **14.2 UN proper shipping name**

DIETHYL ETHER (ETHYL ETHER)

### **14.3 Transport hazard class(es)**

3

### **14.4 Packing group**

ADR/IMDG: I

IATA: I

### **14.5 Environmental hazards**

### **14.6 Special precautions for user**

Not applicable

### **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable

## **15. Regulatory information**

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

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.

### **15.2 Chemical safety assessment**

Not applicable

## **16. Other information**

### **Other precautionary statements**

P243 Take precautionary measures against static discharge.  
P233 Keep container tightly closed.  
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 or face protection.  
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.  
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.

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In respect of the previous review, changes have been made to the following sections: 5

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.