

Safety data sheet
 according to UK REACH

Page 1/11

Printing date 05.09.2025

Revision: 05.09.2025

Version number 3.04 (replaces version 3.03)

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

- **1.1 Product identifier**
- **Trade name:** Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %
- **Article number:** 5483
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 PANREAC QUIMICA S.L.U.
 C/Garraf 2
 Polígono Pla de la Bruguera
 E-08211 Castellar del Vallès (Barcelona)
 Tel. (+34) 937 489 400
 Fax. (+34) 937 489 401
 e-mail: product.safety@itwreagents.com
- **Further information obtainable from:** email: product.safety@panreac.com
- **1.4 Emergency telephone number:**
 Single telephone number for emergency calls: 112 (EU)
 Tel.: (+34) 937 489 499

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 Flam. Liq. 1 H224 Extremely flammable liquid and vapour.
 Eye Irrit. 2 H319 Causes serious eye irritation.
 STOT SE 3 H336 May cause drowsiness or dizziness.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**


 GHS02 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**
 Diethyl ether

(Contd. on page 2)

GB

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 1)

· **Hazard statements**

H224 Extremely flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

· **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

EUH019 May form explosive peroxides.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43-XXXX	ethanol Flam. Liq. 2, H225; Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	>50-<100%
CAS: 60-29-7 EINECS: 200-467-2 Reg.nr.: 01-2119535785-29-XXXX	Diethyl ether Flam. Liq. 1, H224; Acute Tox. 4, H302; STOT SE 3, H336, EUH019, EUH066	>40-≤50%
CAS: 77-09-8 EINECS: 201-004-7	Phenolphthalein Muta. 2, H341; Carc. 1B, H350; Repr. 2, H361f Specific concentration limit: Carc. 1B; H350: C ≥ 1 %	≤0.1%

· **SVHC**

77-09-8 Phenolphthalein

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:** Seek medical treatment.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately remove any clothing soiled by the product.
If skin irritation continues, consult a doctor.

· **After eye contact:** Call a doctor immediately.

(Contd. on page 3)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 2)

- **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**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
Forms explosive mixtures with air at ambient temperatures.
Vapours are heavier than air and may spread along floors.
Beware of backfiring.
Forms explosive mixtures with air on intense heating.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Contain escaping vapours with water.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
Avoid substance contact.
Do not inhale steams/aerosols.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Clean up affected area.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.

(Contd. on page 4)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 3)

Protect from heat.

Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Store in a cool location.

· **Information about storage in one common storage facility:** Away from sources of ignition and heat.

· **Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Open receptacle only under localised extractor facilities.

Store receptacle in a well ventilated area.

Store only outside or in explosion proof rooms.

Avoid contact with air / oxygen (formation of peroxide).

Store under lock and key and with access restricted to technical experts or their assistants only.

· **Recommended storage temperature:** < 15°C

· **Storage class:** 3

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

60-29-7 Diethyl ether

WEL Short-term value: 620 mg/m³, 200 ppm

Long-term value: 310 mg/m³, 100 ppm

· **DNELs**

64-17-5 ethanol

Oral	Long-term - systemic effects, general population	87 mg/kg
Dermal	Acute - systemic effects, worker	343 mg/kg
	Long term - systemic effects, general population	206 mg/kg
Inhalative	Acute - local effects, worker	1,900 mg/m ³
	Long-term - systemic effects, worker	950 mg/m ³
	Acute - local effects, general population	950 mg/m ³
	Long-term - systemic effects, general population	114 mg/m ³

· **PNECs**

64-17-5 ethanol

Aquatic compartment - freshwater	0.96 mg/L
Aquatic compartment - marine water	0.79 mg/L
Aquatic compartment - water, intermittent releases	2.75 mg/L
Aquatic compartment - sediment in freshwater	3.6 mg/kg
Terrestrial compartment - soil	0.63 mg/kg
Sewage treatment plant	580 mg/L
Oral secondary poisoning	0.72 mg/kg food

· **Additional information:** The lists valid during the making were used as basis.

(Contd. on page 5)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 4)

- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Use suitable respiratory protective device only when aerosol or mist is formed.
- **Hand protection**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact gloves made of the following materials are suitable:**
Fluorocarbon rubber (Viton)
Recommended thickness of the material: ≥ 0.7 mm
Value for the permeation: Level ≥ 480 min
- **As protection from splashes gloves made of the following materials are suitable:**
Fluorocarbon rubber (Viton)
Recommended thickness of the material: ≥ 0.7 mm
Value for the permeation: Level ≥ 480 min
- **Eye/face protection**
 Tightly sealed goggles
- **Body protection:** Flame retardant antistatic protective clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Liquid
- **Colour:** Colourless
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** ≤ 35 °C
- **Flammability** Highly flammable.

(Contd. on page 6)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 5)

· Lower and upper explosion limit	
· Lower:	1.7 Vol %
· Upper:	36 Vol %
· Flash point:	<10 °C
· Auto-ignition temperature:	170 °C
· Decomposition temperature:	Not determined.
· pH at 20 °C	~7
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	587 hPa
· Density and/or relative density	
· Density at 20 °C:	0.765 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information	
· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	May form explosive peroxides.
· Solvent content:	
· Organic solvents:	99.9 %
· VOC (EC)	99.90 %
· Solids content:	0.1 %
· Change in condition	
· Evaporation rate	Not determined.

· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Extremely flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

GB

(Contd. on page 7)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 6)

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heating
- **10.5 Incompatible materials:**
oxidizing agent
halogens
halogen-halogen compounds
nonmetals
nonmetallic oxides
nitrites
- **10.6 Hazardous decomposition products:** Peroxides
- **Additional information:**
sensitive to air
light sensitive

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**
Quantitative data on the toxicological effect of this product are not available.

Components	Type	Value	Species
ATE (Acute Toxicity Estimates)			
Oral	LD50	2,525 mg/kg (rat)	

64-17-5 ethanol			
Oral	LD50	8,350 mg/kg (mouse) 10,470 mg/kg (rat)	
Inhalative	LC50/4 h	116.9 mg/l (rat)	

- **Primary irritant effect:**
- **Serious eye damage/irritation** Causes serious eye irritation.
- **After inhalation:** No irritant effect.

· Carcinogenicity	
64-17-5 ethanol	
NOAEL (carcinogenicity)	>3,000 mg/kg bw/day (rat)

· Reproductive toxicity	
64-17-5 ethanol	
NOAEL (Fertility)	13,800 mg/kg bw/day (mouse)

- **STOT-single exposure** May cause drowsiness or dizziness.
- **11.2 Information on other hazards**

· Endocrine disrupting properties	
None of the ingredients is listed.	

GB

(Contd. on page 8)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 7)

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

Type of test	Effective concentration	Method	Assessment
64-17-5 ethanol			
EC50/72 h	275 mg/l (Algae)		
EC50/48 h	12,900 mg/l (Algae)		
LC50/24 h	11,200 mg/l (fish)		
LC50/48 h	12,340 mg/l (daphnia magna)		
LC50/96 h	13,000 mg/l (fish)		

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Chemicals must be disposed of in compliance with the respective national regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR, IMDG, IATA	UN1993
· 14.2 UN proper shipping name	
· ADR, IMDG	FLAMMABLE LIQUID, N.O.S. (DIETHYL ETHER (ETHYL ETHER), ETHANOL (ETHYL ALCOHOL))
· IATA	FLAMMABLE LIQUID, N.O.S. (DIETHYL ETHER (ETHYL ETHER), ETHANOL)

(Contd. on page 9)

GB

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 8)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

3 (F1) Flammable liquids.

· **Label**

3

· **IMDG, IATA**



· **Class**

3 Flammable liquids.

· **Label**

3

· **14.4 Packing group**

· **ADR, IMDG, IATA**

I

· **14.5 Environmental hazards:**

Not applicable.

· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Hazard identification number (Kemler code):**

33

· **EMS Number:**

F-E, S-E

· **Stowage Category**

E

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

0

· **Excepted quantities (EQ)**

Code: E3

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 300 ml

· **Transport category**

1

· **Tunnel restriction code**

D/E

· **IMDG**

· **Limited quantities (LQ)**

0

· **Excepted quantities (EQ)**

Code: E3

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 300 ml

· **UN "Model Regulation":**

UN 1993 FLAMMABLE LIQUID, N.O.S. (DIETHYL ETHER (ETHYL ETHER), ETHANOL (ETHYL ALCOHOL)), 3, I

GB

(Contd. on page 10)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 9)

SECTION 15: Regulatory information

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

· **Regulated explosives precursors**

None of the ingredients is listed.

· **Regulated poisons**

None of the ingredients is listed.

· **Reportable explosives precursors**

None of the ingredients is listed.

· **Reportable poisons**

None of the ingredients is listed.

· **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** P5a FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 10 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50 t

· **National regulations:**

· **Substances of very high concern (SVHC) according to UK REACH**

77-09-8 Phenolphthalein

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H224 Extremely flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H361f Suspected of damaging fertility.
EUH019 May form explosive peroxides.
EUH066 Repeated exposure may cause skin dryness or cracking.

- **Department issuing SDS:** Dept. Compliance

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

(Contd. on page 11)

Trade name: Ethanol / Diethyl Ether 1:1 v/v + Phenolphthalein 0,1 %

(Contd. of page 10)

PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Flam. Liq. 1: Flammable liquids – Category 1
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 1B: Carcinogenicity – Category 1B
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
· *** Data compared to the previous version altered.**

GB