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

1.1 Identification of the substance or preparation

Name: Ethanol 96% v/v

Synonym: Ethyl Alcohol

REACH Registration Number: 01-2119457610-43-XXXX

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. 2

Hazard Pictograms

Signal word
Danger

Hazard statements
H225 Highly flammable liquid and vapour.

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.
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).
F Highly flammable
R11

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

3. Component Composition/Information

Name: Ethanol 96% v/v
Formula: CH₃CH₂OH  M. = 46.07  CAS [64-17-5]
EC number (EINECS): 200-578-6
EC index number: 603-002-00-5
REACH Registration Number: 01-2119457610-43-XXXX

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 sickness persists, seek medical assistance.

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.

4.5 Swallowing:
Drink large amounts of water. Induce vomiting. Do not administer emetics. Do not administer animal carbon. Do not drink milk. Seek medical assistance.

5. Fire-fighting means

5.1 Suitable fire-extinguishing means:
Water. Carbon dioxide (CO2). Foam. Dry powder.

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. Risk of inflammation due to accumulation of electrostatic charges.

5.4 Protective equipment:
Suitable clothing and footwear.

6. Measures to be taken in the event of accidental spillage
6.1 Individual precautions:  
No special indications.

6.2 Precautions for care of the environment:  
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:  
No special indications.

7.2 Storage:  
Well sealed containers. In well ventilated premises. 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-ED: 1.000 ppm - 1.910 mg/m3

8.3 Respiratory protection:  
In the event of fumes forming/aerosols, use suitable respiratory protection. Filter A. Filter P.

8.4 Hand protection:  
Use suitable gloves neopren PVC nitrile

8.5 Eye protection:  
Use suitable goggles.

8.6 Individual hygiene measures:  
Remove contaminated 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:** -114,1 ºC
- **Initial boiling point and boiling range:** 78,5 ºC
- **Flash point:** 14 ºC
- **Flammability (solid, gas):** N/A
Upper/lower flammability or explosive limits: 15 %/(V) / 3,5 %/(V)
Vapour pressure: 59 hPa (20 °C)
Vapour density: N/A
Relative density: (20/4) 0,805
Solubility: Miscible with water and most of the solvents
Partition coefficient: n-octanol/water:
N/A
Auto-ignition temperature: ~425 °C
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:

10.3 Hazardous decomposition products:
No specific data.

10.4 Complementary information:
The gases/fumes can form explosive mixtures with the air.

11. Toxicological information

11.1 Acute toxicity:
LD L0 oral hmn : 1.400 mg/kg
LD50 oral rat : 7.060 mg/kg
LC L0 inh gpg : 21900 ppm
LC50 inh rat : 20000 ppm 10h

11.2 Dangerous effects for health:
If fumes inhaled: Irritations to the mucosae slight Risk of cutaneous
absorption. Through contact with the eyes: irritations slight If swallowed:
Can cause nausea vomiting Systemic effects: intoxication vertigo narcosis
respiratory paralysis

12. Environmental information

12.1 Toxicity:
12.1.1 - EC50 test (mg/l):
Bacteria (Photobacterium phosphoreum) 47000 mg/l
Classification: Toxic
Bacteria (Ps. putida) EC0 >6500 mg/l
Classification: Toxic
Algae (Sc. cuadricauda) EC0 >5000 mg/l
Classification: Toxic
Algae (M. aeruginosa) EC0 >1450 mg/l
Classification: Toxic
Crustaceans (Daphnia magna) EC0 >7800 mg/l
Classification: Toxic
Fish >10.000 mg/l
Classification: Toxic or hardly toxic
12.1.2 - Receptor medium:
Risk for the water environment
Low
Risk for the land environment
Low
12.1.3 - Observations:
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:
  - Easily 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.

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.


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.


14. Information concerning transport

Overland (ADR):
- Technical name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
- UN 1170 Class: 3 Packaging group: II (D/E)

By sea (IMDG):
- Technical name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
- UN 1170 Class: 3 Packaging group: II

By air (ICAI-IATA):
- Technical name: Ethanol
- UN 1170 Class: 3 Packaging group: II
15. Regulatory information


16. Other information

Other precautionary statements
- P243 Take precautionary measures against static discharge.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P370+P378 In case of fire: Use for extinction.
- P403+P235 Store in a well-ventilated place. Keep cool.

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

<table>
<thead>
<tr>
<th>R-phrase(s):</th>
<th>R11</th>
<th>Highly flammable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-phrase(s):</td>
<td>S16</td>
<td>Keep away from sources of ignition - No smoking.</td>
</tr>
<tr>
<td></td>
<td>S7</td>
<td>Keep container tightly closed.</td>
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</tbody>
</table>

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.

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