



Safety Data Sheet
According to Regulation (EC) 1907/2006
and (EU) 453/2010

A656 Acetaldehyde

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

1.1 Product identifier

Name:

Acetaldehyde

Synonym:

Acetic Aldehyde, Acetylaldehyde, Ethanal, Ethyl Aldehyde

CAS: [75-07-0]

REACH Registration Number: 01-2119918285-36-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

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) n° 1272/2008.

Flam. Liq. 1

Eye Irrit. 2

STOT SE 3

Carc. 2

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

Xn Harmful	R40
F+ Extremely flammable	R36/37
	R12

2.2 Label elements:

Hazard Pictograms



Signal word

Danger

Hazard statements

- H224 Extremely flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.

Precautionary statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.

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: Acetaldehyde

Formula: C₂H₄O M.= 44,05 CAS [75-07-0]

EC number (EINECS): 200-836-8

EC index number: 605-003-00-6

REACH Registration Number: 01-2119918285-36-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:

Seek immediate medical assistance. Wash with plenty of soap and 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:

Wash mouth out immediately. Drink large amounts of water. Seek immediate medical assistance. Do not induce vomiting.

5. Firefighting measures

5.1 Suitable extinguishing media:

Atomized water. Dry powder. Alcohol resistant foam.

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. 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. Protect the respiratory tracts.

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.

7. Handling and storage

7.1 Precautions for safe handling:

Avoid the formation of electrostatic charges. Avoid contact with the skin, eyes or clothing. Ensure adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities:

Well sealed containers. In well ventilated premises. Storage between +2 and +8°C, in a dry place, away from direct light. Away from sources of ignition and heat.

8. Exposure controls/personal protection

8.1 Exposure controls:

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

8.2 Control parameters:

VLA-EC: 25 ppm = 46 mg/m³

8.3 Respiratory protection:

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

8.4 Hand protection:

Use suitable gloves (nitrile)

8.5 Eye/face protection:

Use safety glasses.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use complete protective equipment. 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: Characteristic.

pH:

N/A

Melting point/freezing point: -123,5 °C

Initial boiling point and boiling range: 21 °C

Flash point: - 40 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: 57 %(V) / 4 %(V)

Vapour pressure: 1.000 hPa (20 °C)

Vapour density: N/A

Relative density:

Insertar Aquí Grupo de repetición

(16/4) 0,788 g/ml

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity:

N/A

10. Stability and reactivity

10.1 Conditions to avoid:

High temperatures.

10.2 Incompatible materials:

Oxidant agents. Halogens. Hydrogen peroxide. Iron. Nitrogen oxides. Alkaline solutions. Acids. Halogen oxides Air Rubber.

10.3 Hazardous decomposition products:

Peroxides.

10.4 Chemical stability:

Tends to polymerize. 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:

LD50 oral rat : 661 mg/kg

TC L0 inh man : 134 ppm (V) 30 min

LC50 inh rat : 24 g/m³ 4h

11.2 Dangerous effects for health:

If inhaled: Irritations to the mucosae coughing breathing difficulties Upon contact with the skin: irritations Through contact with the eyes: irritations Systemic effects: nausea vomiting spasms narcosis hepatic 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):

Fish (Leuciscus Idus) 124 mg/l

Protozoa: 57 mg/l

- Receptor medium:

Risk for the water environment

High

Risk for the land environment

High

- Observations:

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:

Do not allow it to enter soils or water channels.

Risk of formation of explosive fumes on the surface of the water.

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

Overland (ADR):

Technical name: ACETALDEHYDE

UN 1089 Class: 3 Packaging group: I (D/E)

By sea (IMDG):

Technical name: ACETALDEHYDE

UN 1089 Class: 3 Packaging group: I

By air (ICAI-IATA):

Technical name: Acetaldehyde

UN 1089 Class: 3 Packaging group: I

Packaging instructions: CAO 361 PAX F

15. Regulatory information

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

16. Other information

Other precautionary statements

P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust, fume, gas, mist, vapours or spray.
P264 Wash...thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, eye protection or face protection.
P281 Use personal protective equipment as required.
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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
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.
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

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

R-phrase(s): **R40** Limited evidence of a carcinogenic effect.
 R36/37 Irritating to eyes and respiratory system.
 R12 Extremely flammable.

S-phrase(s): **S36/37** Wear suitable protective clothing and gloves.
 S33 Take precautionary measures against static discharges.
 S16 Keep away from sources of ignition - No smoking.

Version and revision date : 5 24.07.17

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In respect of the previous review, changes have been made to the following sections: 1,4,5,6,7,10

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.