



## Safety Data Sheet

According to Regulation (EC) 1907/2006



1881 Acetonitrile

# Identification of the substance/preparation and of the company or firm

## 1.1 Identification of the substance or preparation

Name:

Acetonitrile

## 1.2 Synonym:

Cyanomethane, Ethanenitrile, Methyl Cyanide

## 1.3 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

## 1.4 Identification of the company or firm:

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C/Garraf 2

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# Identification of dangers

Classification of the substance or the mixture.

## Classification Regulation (CE) n° 1272/2008.

Flam. Liq. 2

Acute Tox. 4

Acute Tox. 4

Acute Tox. 4

Eye Irrit. 2

## Hazard Pictograms



## Signal word

Warning

## Hazard statements

H225 Highly flammable liquid and vapour.

H332 Harmful if inhaled.

H312 Harmful in contact with skin.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

## Precautionary statements

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

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P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

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

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 R36

F Highly flammable R20/21/22

R11

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

# Component Composition/Information

Name: Acetonitrile

Formula: CH<sub>3</sub>CN M.= 41,05 CAS [75-05-8]

EC number (EINECS): 200-835-2

EC index number: 608-001-00-3

## 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 immediately to provide artificial respiration. Seek immediate 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. Seek medical assistance.

### 4.5 Swallowing:

Drink large amounts of water. Seek medical assistance.

## Fire-fighting means

### 5.1 Suitable fire-extinguishing means:

Water. Carbon dioxide (CO<sub>2</sub>). Foam. Dry powder.

### 5.2 Fire-fighting means which must NOT be used:

### 5.3 Special risks:

Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. May form explosive mixtures with the air. Risk of inflammation due to accumulation of electrostatic charges. In the event of fire, toxic fumes may form. Precipitate fumes formed with water.

### 5.4 Protective equipment:

Suitable clothing and footwear. Self-contained breathing equipment.

## Measures to be taken in the event of accidental spillage

### 6.1 Individual precautions:

Do not inhale the fumes. Avoid contact with the skin, eyes or clothing. Ensure adequate ventilation.

**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. Clean any remains with plenty of water.

## Handling and storage

**7.1 Handling:**

Avoid the formation of electrostatic charges.

**7.2 Storage:**

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat. Atmospheric temperature. Restricted access, only authorized to technicians. Do not store in plastic containers.

## 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: 60 ppm ó 102 mg/m<sup>3</sup>

VLA-ED: 40 ppm ó 68 mg/m<sup>3</sup>

**8.3 Respiratory protection:**

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

## Physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry:
Odour: Characteristic.
pH:
Melting point/freezing point: -48 °C
Initial boiling point and boiling range: 80 - 82 °C
Flash point: 2 °C
Flammability (solid, gas):
Upper/lower flammability or explosive limits: 16 %(V) / 4,4 %(V)
Vapour pressure: 97 hPa (20 °C)
Vapour density:
Relative density: (20/4) 0,786
Solubility: Miscible with water
Partition coefficient: n-octanol/water:
Auto-ignition temperature: 525 °C
Decomposition temperature:
Viscosity:

## Stability and reactivity

### 10.1 Conditions which should be avoided:

### 10.2 Matter which should be avoided:

Acids. Concentrated sulfuric acid. Oxidant agents (amongst others: perchloric acid, perchlorates, halogenates, CrO<sub>3</sub>, halogen oxides, nitric acid, nitrogen oxides, non-metal oxides, chromo-sulphuric acid). Rubber. Cyanided complexes. In gas form/steam with water. (danger of explosion with air).

### 10.3 Hazardous decomposition products:

Hydrogen cyanide.

### 10.4 Complementary information:

Heat sensitive.

## Toxicological information

- **Acute toxicity:**

TDL0 oral man : 570 mg/kg

LD50 oral rat : 2.730 mg/kg

LD50 skn rbt : 1.250 mg/kg

TC L0 inh man : 160 ppm (V) 4h

LC50 inh rat : 7551 ppm 4h

- **Dangerous effects for health:**

Upon contact with the skin: Risk of cutaneous absorption. If swallowed: nausea vomiting If it is absorbed in large quantities: breathing difficulties Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## **Environmental information**

### **12.1 Mobility:**

Log P(oct): -0,34

### **12.2 Ecotoxicity:**

12.1.1 - EC50 test (mg/l):

Bacteria (Photobacterium phosphoreum) 19500 mg/l

Classification:

Toxic

Fish (Leuciscus Idus) 5850 mg/l

Classification:

Very toxic

12.2.2 - Receptor medium:

Risk for the water environment

High

Risk for the land environment

Medium

12.2.3 - Observations:

### **12.3 Degradability:**

12.3.1 - Test:

12.3.2 - Biotic degradation classification:

BOD5/COD

Biodegradability

12.3.3 - Abiotic degradation depending on pH:

12.3.4 - Observations:

Data not available.

### **12.4 Accumulation:**

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk

12.4.3 - Observations:

Data not available.

### **12.5 Other possible effects on the environment:**

Pollutant product.

Do not allow it to enter soils or water channels.

## **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.

### **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.

## **Information concerning transport**

Overland (ADR):

Technical name: ACETONITRILE

UN 1648 Class: 3 Packaging group: II (D/E)

By sea (IMDG):

Technical name: ACETONITRILE

UN 1648 Class: 3 Packaging group: II

By air (ICAI-IATA):

Technical name: Acetonitrile

UN 1648 Class: 3 Packaging group: II

Packaging instructions: CAO 307 PAX 305

## **Regulatory information**

# 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/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.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P322 Specific measures (see on this label).

P330 Rinse mouth.

P337+P313 If eye irritation persists: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

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)

R-phrases(s):	<b>R36</b> Irritating to eyes. <b>R20/21/22</b> Harmful by inhalation, in contact with skin and if swallowed. <b>R11</b> Highly flammable.
S-phrases(s):	<b>S36/37</b> Wear suitable protective clothing and gloves. <b>S16</b> Keep away from sources of ignition - No smoking.

Review number and date: 3 3.11.10

Date published: 3.11.10

In respect of the previous review, changes have been made to the following sections: 2, 3, 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.