



## 1491 Potassium Cyanide

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

#### 1.1 Identification of the substance or preparation

Name:

Potassium Cyanide

**Synonym:**

**REACH Registration Number:** 01-2119486407-29-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](mailto: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.**

Acute Tox. 2

Acute Tox. 1

Acute Tox. 2

Aquatic Acute 1

Aquatic Chronic 1

### Hazard Pictograms



**Signal word**

Danger

**Hazard statements**

H330 Fatal if inhaled.

H310 Fatal in contact with skin.

H300 Fatal if swallowed.

EUH032 Contact with acids liberates very toxic gas.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

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.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

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

**N** Dangerous for the environment

R50/53

**T+** Very toxic

R32

R26/27/28

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

**3. Component Composition/Information**

Name: Potassium Cyanide

Formula: KCN M.= 65,12 CAS [151-50-8]

EC number (EINECS): 205-792-3

EC index number: 006-007-00-5

REACH Registration Number: 01-2119486407-29-XXXX

**4. First aid****4.1 General indications:**

The first-aider must be protected. Seek immediate medical attention. (hydrocyanic intoxication). In the event of respiratory stoppage, apply artificial respiration immediately. 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. Seek immediate medical assistance.

#### **4.4 Eyes:**

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

#### **4.5 Swallowing:**

Drink large amounts of water. Induce vomiting. Administer a solution of medical-usage active charcoal. Seek immediate medical assistance. Indications for the doctor: Provide antidotes (sodium thiosulphate, dimethylaminophenol, CO<sub>2</sub>-EDTA).

### **5. Fire-fighting means**

#### **5.1 Suitable fire-extinguishing means:**

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

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

Water.

#### **5.3 Special risks:**

Incombustible. In the event of fire, toxic fumes may form: HCN. Keep the workplace dry. The substance must not come into contact with water.

#### **5.4 Protective equipment:**

Suitable clothing and footwear.

### **6. Measures to be taken in the event of accidental spillage**

#### **6.1 Individual precautions:**

Evacuate all non-essential personnel. Avoid contact with the skin, eyes or clothing. Do not inhale the dust. Protect the respiratory tracts.

#### **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:**

Carry out the operation with maximum precaution. Collect up dry and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

### **7. Handling and storage**

#### **7.1 Handling:**

No special indications.

#### **7.2 Storage:**

Well sealed containers. Dry atmosphere. In well ventilated premises. Room temperature. Restricted access, only authorized to technicians. Do not store in metal containers.

### **8. Staff exposure/protection controls**

#### **8.1 Technical protective measures:**

No special indications.

**8.2 Exposure limit control:**

VLA-EC(CN): 5 mg/m<sup>3</sup> dermal resorption

**8.3 Respiratory protection:**

Use suitable breathing equipment. Filter B. Filter P3.

**8.4 Hand protection:**

Use suitable gloves neopren PVC nitrile latex

**8.5 Eye protection:**

Use suitable goggles.

**8.6 Individual hygiene measures:**

Remove contaminated clothing. Use complete protective equipment. Wash hands and face before breaks and when the job is done. Avoid the formation of dust.

**8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

**9. Physical and chemical properties**

Appearance: solid

Colour: White

Granulometry: N/A

Odour: Slight, of bitter almonds.

pH: ~11 - 12

Melting point/freezing point: 634,5 °C

Initial boiling point and boiling range:

N/A

Flash point:

N/A

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits:

N/A

Vapour pressure: N/A

Vapour density: N/A

Relative density:

N/A

Solubility: 680 g/l in water ( 20 °C )

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Viscosity dynamic:N/A

Viscosity dynamic:

N/A

**10. Stability and reactivity****10.1 Conditions which should be avoided:**

The product is chemically stable under standar ambient conditions (room temperature).

## **10.2 Matter which should be avoided:**

Strong oxidant agents. Magnesium. Water. Alkaline salts. Fluorine. Acids. Chlorates. Nitrites. Nitrates.

## **10.3 Hazardous decomposition products:**

Hydrogen cyanide.

## **10.4 Complementary information:**

Hygroscopic.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

LD L0 oral man : 2,857 mg/kg

LD50 oral hmn : 2.857 mg/kg

LD50 oral rat : 5 mg/kg

LD50 ipr mus : 5,991 mg/kg

### **11.2 Dangerous effects for health:**

If fumes inhaled: Irritations to the mucosae nausea vomiting tachycardia breathing difficulties vertigo loss of consciousness Upon contact with the skin: Risk of cutaneous absorption. If swallowed: Due to absorption: lethal effect respiratory paralysis cardiovascular failure Systemic effects: For cyanide compounds and nitriles generally: Cellular respiratory blockage cardiovascular disorders breathing difficulties loss of consciousness

## **12. Environmental information**

### **12.1 Toxicity:**

12.1.1 - EC50 test (mg/l):

Bacteria (Ps. putida) (CN) EC0 0,001 mg/l

Classification: Extr. toxic

Algae (Sc. quadricauda) (CN) EC0 0,03 mg/l

Classification: Extr. toxic

Crustaceans (Daphnia magna) (CN) 2 mg/l

Classification: Extr. toxic

12.1.2. - Receptor medium: Risk for the water environment

High Risk for the land environment

Medium 12.1.3. - Observations:

The ecotoxicity is due to the ion CN<sup>-</sup>.

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

12.2.1 - Test:

12.2.2. - Biotic degradation classification:

BOD5/COD

Biodegradability

12.2.3. - Abiotic degradation depending on pH:

12.2.4. - Observations:

### **12.3 Bioaccumulative potential:**

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

### **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:**

Do not allow it to enter soils or water channels.

High toxic product for water.

Despite dilution, the compound produces toxic mixtures with water.

## **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.

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. Information concerning transport**

Overland (ADR):

Technical name: POTASSIUM CYANIDE, SOLID

UN 1680    Class: 6.1    CONTAM. MAR    PELIG.M.AMB    Packaging group: I  
(C/E)

By sea (IMDG):

Technical name: POTASSIUM CYANIDE, SOLID

UN 1680    Class: 6.1    CONTAM. MAR    PELIG.M.AMB    Packaging group: I

By air (ICAI-IATA):

Technical name: Potassium cyanide, solid

UN 1680    Class: 6.1    CONTAM. MAR    PELIG.M.AMB    Packaging group: I

Packaging instructions:    CAO 673    PAX 666

## **15. Regulatory information**

The substance is subject to Council Regulation (EC) No 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technology.

## **16. Other information**

### Other precautionary statements

P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P284 Wear respiratory protection.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P320 Specific treatment is urgent (see on this label).  
P321 Specific treatment (see on this label).  
P322 Specific measures (see on this label).  
P330 Rinse mouth.  
P361 Remove/Take off immediately all contaminated clothing.  
P363 Wash contaminated clothing before reuse.  
P391 Collect spillage.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

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

R-phrases(s):	<b>R50/53</b> Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. <b>R32</b> Contact with acids liberates very toxic gas. <b>R26/27/28</b> Very toxic by inhalation, in contact with skin and if swallowed.
S-phrases(s):	<b>S45</b> In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). <b>S29</b> Do not empty into drains. <b>S28a</b> After contact with skin, wash immediately with plenty of water. <b>S7</b> Keep container tightly closed. <b>S60</b> This material and its container must be disposed of as hazardous waste. <b>S61</b> Avoid release to the environment. Refer to special instructions/safety data sheets.

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.