



S a f e t y D a t a S h e e t  
According to Regulation (EC) 1907/2006  
and (EU) 453/2010

## 3080 1-Methyl-2-Pyrrolidone

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

#### 1.1 Product identifier

Name:

1-Methyl-2-Pyrrolidone

#### Synonym:

N-Methylpyrrolidone, NMP

CAS: [872-50-4]

REACH Registration Number: 01-2119472430-46-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](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

#### 2.1 Classification of the substance or the mixture.

Classification Regulation (CE) n° 1272/2008.

Repr. 1B

Eye Irrit. 2

STOT SE 3

Skin Irrit. 2

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

T Toxic

R36/37/38

R61

## 2.2 Label elements:

### Hazard Pictograms



### Signal word

Danger

### Hazard statements

H360D May damage the unborn child.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H315 Causes skin irritation.

### Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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.

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: 1-Methyl-2-Pyrrolidone

Formula: C<sub>5</sub>H<sub>9</sub>NO M.= 99,13 CAS [872-50-4]

EC number (EINECS): 212-828-1

EC index number: 606-021-00-7

REACH Registration Number: 01-2119472430-46-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:**

Go out into the fresh air. Loosen clothing to release respiratory channels.

#### **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. In the event of irritation, seek medical assistance.

#### **4.5 Swallowing:**

Drink large amounts of water. Induce vomiting. In the event of sickness, seek medical assistance.

### **5. Firefighting measures**

#### **5.1 Suitable extinguishing media:**

Water. Carbon dioxide (CO<sub>2</sub>). Alcohol resistant foam. Dry powder.

#### **5.2 Unsuitable extinguishing media:**

No specific data.

#### **5.3 Special hazards arising from the substance or mixture:**

Combustible. Auf Rückzündung achten In the event of fire, toxic fumes may form: NO<sub>x</sub>. Precipitate fumes formed with water. Do not allow extinguishing water into surface or underground water courses.

#### **5.4 Advice for firefighters:**

Suitable clothing and footwear. Self-contained breathing equipment.

### **6. Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures:**

No special indications.

#### **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. Clean any remains with plenty of water.

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

#### **7.1 Precautions for safe handling:**

No special indications.

#### **7.2 Conditions for safe storage, including any incompatibilities:**

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat.

**Recommended storage temperature:** Room temperature.

## **8. Exposure controls/personal protection**

### **8.1 Exposure controls:**

No special indications.

### **8.2 Control parameters:**

VLA-EC: 75 ppm = 309 mg/m<sup>3</sup> VLA-ED: 25 ppm = 103 mg/m<sup>3</sup>

### **8.3 Respiratory protection:**

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

### **8.4 Hand protection:**

Use suitable gloves

### **8.5 Eye/face protection:**

Use suitable goggles.

### **8.6 Individual hygiene measures:**

Remove contaminated clothing. Use suitable work clothing. 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: 8,5 - 10,0

Melting point/freezing point: -23 °C

Initial boiling point and boiling range: 202 °C

Flash point: 95 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: 9,5 %(V) / 1,3 %(V)

Vapour pressure: 40 hPa (100 °C)

Vapour density: N/A

Relative density:

Insertar Aquí Grupo de repeticion

(20/4) 1,033 g/ml

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature: 269 °C

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity: 1,67 mPa.s (20 °C)

## **10. Stability and reactivity**

### **10.1 Conditions to avoid:**

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

## **10.2 Incompatible materials:**

Strong oxidant agents.

## **10.3 Hazardous decomposition products:**

No specific data.

## **10.4 Chemical stability:**

The gases/fumes can form explosive mixtures with the air.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

LD50 oral rat : 3.914 mg/kg

LD50 skn rbt : 8.000 mg/kg

LC50 inh rat : 5.1 mg/l 4h

LD50 ipr mus : 3.050 mg/kg

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

Through contact with the eyes: irritations If fumes inhaled: Irritations to the respiratory tracts. Upon contact with the skin: irritations Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## **12. Environmental information**

### **12.1 Toxicity:**

#### **- EC50 test (mg/l):**

Bacteria 9000 mg/l

Classification:

Hardly toxic.

Algae 500 mg/l

Classification:

Toxic

Crustaceans (Daphnia magna) 1000 mg/l

Classification:

Toxic

Fish (Leuciscus Idus) 4000 mg/l

Classification:

Toxic

#### **- Receptor medium:**

Risk for the water environment

Low

Risk for the land environment

Low

#### **- Observations:**

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

#### **- Test:**

BOD5 = 1,1 g/g

DOC 1,6 g/g

#### **- Biotic degradation classification:**

BOD5/COD

Biodegradability

High, over 1/3

#### **- Abiotic degradation depending on pH:**

#### **- Observations:**

Easily 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:**

No interferences are to be anticipated in treatment plants if use correctly.

Product hardly pollutant for water.

Do not allow it to enter soils or water channels.

## **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**

Not classified as dangerous in the meaning of transport regulations.

## **15. Regulatory information**

The substance is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

## **16. Other information**

### **Other precautionary statements**

P281 Use personal protective equipment as required.  
P302+P352 IF ON SKIN: 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.  
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.  
P321 Specific treatment (see on this label).  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
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):     **R36/37/38** Irritating to eyes, respiratory system and skin.

**R61** May cause harm to the unborn child.

S-phrase(s):     **S45** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**S53** Avoid exposure - obtain special instructions before use.

Version and revision 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.