



## Safety Data Sheet

According to Regulation (EC) 1907/2006



A811 Hydrazinium Hydroxide 100%

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

## 1.1 Identification of the substance or preparation

Name:

Hydrazinium Hydroxide 100%

**Synonym:**

Hydrazine Hydrate

**REACH Registration Number:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

## 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

## Identification of dangers

Classification of the substance or the mixture.

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

Carc. 1B

Acute Tox. 3

Acute Tox. 3

Acute Tox. 3

Skin Corr. 1B

Skin Sens. 1

Aquatic Acute 1

Aquatic Chronic 1

#### Hazard Pictograms



#### Signal word

Danger

#### Hazard statements

H350 May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H331 Toxic if inhaled.

H311 Toxic in contact with skin.

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

P201 Obtain special instructions before use.

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

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash...thoroughly after handling.

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

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

	R43
<b>N</b> Dangerous for the environment	R34
<b>T</b> Toxic	RE23/24/25
	R45
	R50/53

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

## Component Composition/Information

Name: Hydrazinium Hydroxide 100%

Formula:  $\text{H}_2\text{N-NH}_3^+ \text{OH}^-$  M.= 50,06 CAS [7803-57-8]

EC number (EINECS): 206-114-9

EC index number: 007-008-00-3

## 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.

### 4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing. Take the product out with cotton wool soaked in polyethylene-glycol 400.

### 4.4 Eyes:

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

### 4.5 Swallowing:

Drink lemon juice, vinegar or milk mixed with raw eggs. Subsequently, drink large amounts of water. Drink lemon juice, vinegar or milk mixed with raw eggs. Subsequently, drink large amounts of water. Avoid vomiting (there is a risk of perforation). Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Seek immediate medical assistance.

## Fire-fighting means

### 5.1 Suitable fire-extinguishing means:

Dry powder. Water. Foam.

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

No specific data.

**5.3 Special risks:**

Combustible. 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 explosion in the event of decomposition.

**5.4 Protective equipment:**

Suitable clothing and footwear.

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

**6.1 Individual precautions:**

Do not inhale the fumes.

**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. Neutralize with bleach (solution of NaClO).

## Handling and storage

**7.1 Handling:**

Handle under an extractor fan.

**7.2 Storage:**

Well sealed containers. In well ventilated premises. In a cool place.

## Staff exposure/protection controls

**8.1 Technical protective measures:**

No special indications.

**8.2 Exposure limit control:**

VLA-ED: 0,01 ppm - 0,013 mg/m<sup>3</sup> dermal resorption

**8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter K2. 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 and face before breaks and when the job is done. Do not eat, drink or smoke in the workplace. Do not inhale the substance.

**8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

## Physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry: N/A

Odour: Characteristic.

pH: 12 ((640 g/l))

Melting point/freezing point: -51 °C

Initial boiling point and boiling range: 119 °C

Flash point: 75 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: / 3,4 %(V)

Vapour pressure: 11 hPa (20 °C)

Vapour density: N/A

Relative density: (20/4) 1,032

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature: 280 °C

Decomposition temperature: N/A

Viscosity: N/A

## 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 acids. Oxidant agents. Nitrites. Glass. Rubber.

**10.3 Hazardous decomposition products:**

Ammonia. Hydrogen.

**10.4 Complementary information:**

Hygroscopic.

## Toxicological information

- **Acute toxicity:**

LD50 oral rbt : 55 mg/kg

LD50 oral rat : 129 mg/kg

LD50 ipr mus : 156 mg/kg

- **Dangerous effects for health:**

If inhaled: coughing breathing difficulties oedemas in the respiratory tract Irritations to the mucosae and respiratory tracts. Upon contact with the skin: burns Risk of cutaneous absorption. Risk of sensitization allergic reaction Through contact with the eyes: burns Risk of blindness (irreversible injury of the optic nerve) If swallowed: nausea vomiting Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. Can cause perforation in the oesophagus and stomach. Systemic effects: effects on the central nervous system Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## Environmental information

**12.1 Toxicity:**

12.1.1 - EC50 test (mg/l):

12.1.2. - Receptor medium:

Risk for the water environment

Risk for the land environment

12.1.3. - Observations:

Ecotoxic data not available.

## **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:

Data not available.

## **12.3 Bioaccumulative potential:**

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

Data not available.

## **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 pollutant product.

# **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: HYDRAZINE AQUEOUS SOLUTION, with more than 37% hydrazine by mass  
UN 2030 Class: 8 6.1 PELIG.M.AMB Packaging group: II (E)

By sea (IMDG):

Technical name: HYDRAZINE AQUEOUS SOLUTION, with more than 37% hydrazine by mass  
UN 2030 Class: 8 6.1 PELIG.M.AMB Packaging group: II

By air (ICAI-IATA):

Technical name: Hydrazine, aqueous solution  
UN 2030 Class: 8 6.1 PELIG.M.AMB Packaging group: II

Packaging instructions: CAO 855 PAX F

## 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)

## Other information



### **Other precautionary statements**

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P310 Immediately call a POISON CENTER or doctor/physician.

P311 Call a POISON CENTER or doctor/physician.

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

P321 Specific treatment (see on this label).

P322 Specific measures (see on this label).

P330 Rinse mouth.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P338 Remove contact lenses, if present and easy to do. Continue rinsing.

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):	<p><b>R43</b> May cause sensitisation by skin contact.</p> <p><b>R34</b> Causes burns.</p> <p><b>RE23/24/25</b> Also toxic by inhalation, in contact with skin and if swallowed.</p> <p><b>R45</b> May cause cancer.</p> <p><b>R50/53</b> Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>
S-phrases(s):	<p><b>S61</b> Avoid release to the environment. Refer to special instructions/safety data sheets.</p> <p><b>S60</b> This material and its container must be disposed of as hazardous waste.</p> <p><b>S45</b> In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p><b>S53</b> Avoid exposure - obtain special instructions before use.</p>

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.