



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

**3186 Mercury \*standard solution Hg=1,000+-0,002 g/l**

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

**1.1 Product identifier**

Name:

Mercury \*standard solution Hg=1,000+-0,002 g/l

**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 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

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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) nº 1272/2008.**

Acute Tox. 4  
Acute Tox. 4  
Acute Tox. 4  
STOT RE 2  
Eye Irrit. 2  
STOT SE 3  
Skin Irrit. 2

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

**Xn** Harmful

R36/37/38  
R33  
R20/21/22

### **2.2 Label elements:**

#### **Hazard Pictograms**



**Signal word**  
Danger

#### **Hazard statements**

H332 Harmful if inhaled.  
H312 Harmful in contact with skin.  
H302 Harmful if swallowed.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H315 Causes skin irritation.

#### **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P261 Avoid breathing dust, fume, gas, mist, vapours or 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 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: Mercury \*standard solution Hg=1,000+-0,002 g/l

#### COMPOSITION:

##### 0001: Nitric Acid 69%

Formula:  $\text{HNO}_3$  M.= 63,01 CAS [7697-37-2]

EC number (EINECS): 231-714-2

EC index number: 007-004-00-1

REACH Registration Number: 01-2119487297-23-XXXX

**Content:**  $\geq 1\%$   $\leq 5\%$

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

Skin Corr. 1A

Ox. Sol. 3

#### Hazard Pictograms



#### Signal word

Danger

#### Hazard statements

H314 Causes severe skin burns and eye damage.

H272 May intensify fire; oxidiser.

### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P220 Keep/Store away from clothing/combustible materials.  
P221 Take any precaution to avoid mixing with combustibles.  
P260 Do not breathe 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.  
P280 Wear protective gloves, protective clothing, eye protection or face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
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.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P321 Specific treatment (see on this label).  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction.  
P405 Store locked up.

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

**C** Corrosive

**R35** Causes severe burns.

### 0002: Mercury(II) Nitrate

Formula:  $\text{Hg}(\text{NO}_3)_2 \cdot \text{H}_2\text{O}$  CAS [7783-34-8]

EC number (EINECS): 233-152-3

EC index number: 080-002-00-6

**Content:**  $\geq 0,1 \%$   $\leq 1 \%$

### 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.
- H373 May cause damage to organs through prolonged or repeated exposure.
- 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.
- P273 Avoid release to the environment.
- P280 Wear protective gloves, protective clothing, eye protection or 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.
- P314 Get medical advice/attention if you feel unwell.
- 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.

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

<b>N</b> Dangerous for the environment	<b>R50/53</b> Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>T+</b> Very toxic	<b>R33</b> Danger of cumulative effects.
	<b>R26/27/28</b> Very toxic by inhalation, in contact with skin and if swallowed.

## **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.

#### **4.3 Contact with the skin:**

Wash with plenty of 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:**

Drink large amounts of water. Induce vomiting. Call for medical help.

### **5. Firefighting measures**

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

As appropriate to the environment.

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

No specific data.

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

Incombustible. In the event of fire, toxic fumes may form. Upon contact with metals, hydrogen gas may form (there is a risk of explosion).

#### **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.

#### **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. Dry atmosphere. Away from light.

**Recommended storage temperature:** Room temperature. Restricted access, only authorized to technicians.

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

#### **8.1 Exposure controls:**

No special indications.

**8.2 Control parameters:**

TLV-TWA(Hg(NO<sub>3</sub>)<sub>2</sub>): 0,025 mg/m<sup>3</sup> VLA-EC(HNO<sub>3</sub>): 4 ppm = 10 mg/m<sup>3</sup> VLA-ED(HNO<sub>3</sub>): 2 ppm = 5,2 mg/m<sup>3</sup>

**8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter B. Filter P. Filter NOX.

**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:

N/A

Granulometry: N/A

Odour: Odourless.

pH: <1

Melting point/freezing point: N/A

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:

Insertar Aquí Grupo de repetición

~1,016 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:**

Metals. Flammable substances.

**10.3 Hazardous decomposition products:**

Nitrous fumes.

**10.4 Chemical stability:**

No specific data.

**11. Toxicological information****11.1 Acute toxicity:**

: Data not available.

**11.2 Dangerous effects for health:**

The data we have are insufficient for correct toxicological assessment. Based on the physico-chemical properties, the likely dangerous characteristics are: Upon contact with the skin: irritations Through contact with the eyes: irritations If swallowed: Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. Mercury compounds have toxic effects on cells and protoplasts. Symptoms due to acute intoxication of (Hg): Through contact with the eyes: Serious injuries If swallowed and inhaled: Tissue injuries (mouth, oesophagus, stomach and intestinal tract). Metallic taste nausea vomiting stomach pains intestinal disorders Burns in the digestive apparatus oedemas in the respiratory tract pneumonia. Causes blood alterations arrhythmia collapse kidney problems Chronic effects Buccal infections, mercury halo, risk of loss of teeth. Risk of effects on the central nervous system sensitization sight disorders hallucinations dizziness Pregnant women must not be allowed to come into contact with the product. Possible risk of adverse effects to the foetus during pregnancy. Other dangerous characteristics are not discarded.

**12. Environmental information**



### **12.1 Toxicity:**

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

Fish (NO<sub>3</sub>-) > 500 mg/l

Classification: Highly toxic

Bacteria (*Photobacterium phosphoreum*) (Hg++) 0,046 mg/l

Classification: Extr. toxic

Algae (*Sc. quadricauda*) (Hg++) 0,07 mg/l

Classification: Extr. toxic

Algae (*M. aeruginosa*) (Hg++) 0,005 mg/l

Classification: Extr. toxic

Fish (*Salmonidae*) (Hg++) 0,05 mg/l

Classification: Extr. toxic

Fish (*P. promelas*) (Hg++) 0,19 mg/l

Classification: Extr. toxic

Fish (*Leuciscus Idus*) (Hg++) 0,013 mg/l

Classification: Extr. toxic

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

Risk for the water environment (Hg++)

High Risk for the land environment

#### **High - Observations:**

The ecotoxicity is due to the mercury ion.

Toxic product in any environment. Ecotoxicity acute and chronic.

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

#### **- Test:**

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

BOD<sub>5</sub>/COD

Biodegradability

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

#### **- Observations:**

### **12.3 Bioaccumulative potential:**

#### **- Test:**

#### **- Bioaccumulation:**

Risk = High

#### **- Observations:**

The mercury ion is bioaccumulable in the food chain.

### **12.4 Mobility in soil :**

Data not available.

### **12.5 Assessment PBT and MPMB :**

Data not available.

### **12.6 Other adverse effects:**

High pollutant product.

Do not allow it to enter soils or water channels.

Nitrates can encourage eutrophy,

Ecotoxic effects due to the pH variation.

DATA BASED on the components of the preparation.

## **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: MERCURY COMPOUND, LIQUID, N.O.S.

UN 2024 Class: 6.1 CONTAM. MAR Packaging group: II (D/E)

By sea (IMDG):

Technical name: MERCURY COMPOUND, LIQUID, N.O.S.

UN 2024 Class: 6.1 CONTAM. MAR Packaging group: II

By air (ICAI-IATA):

Technical name: Mercury compound, liquid, n.o.s.

UN 2024 Class: 6.1 CONTAM. MAR Packaging group: II

Packaging instructions: CAO 661 PAX 654

## **15. Regulatory information**

The substance is subject to Regulation (EC) No 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals.

## **16. Other information**

### Other precautionary statements

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.  
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.  
P314 Get medical advice/attention if you feel unwell.  
P321 Specific treatment (see on this label).  
P322 Specific measures (see on this label).  
P330 Rinse mouth.  
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.  
P363 Wash contaminated clothing 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-phrases(s):	<b>R36/37/38</b> Irritating to eyes, respiratory system and skin. <b>R33</b> Danger of cumulative effects. <b>R20/21/22</b> Harmful by inhalation, in contact with skin and if swallowed.
S-phrases(s):	<b>S36/37</b> Wear suitable protective clothing and gloves. <b>S26</b> In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Version and revision date : 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.