

Safety Data Sheet  
According to Regulation (EC) 1907/2006



**1428 Mercury(II) Iodide \*red**

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

**1.1 Identification of the substance or preparation**

Name:

Mercury(II) Iodide \*red

**Synonym:**

Mercury Biiodide

**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

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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.

H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

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

R33

R26/27/28

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

## 3. Component Composition/Information

Name: Mercury(II) Iodide \*red

Formula:  $\text{HgI}_2$  M.= 454,40 CAS [7774-29-0]

EC number (EINECS): 231-873-8

EC index number: 080-002-00-6

## 4. 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 (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

#### **4.5 Swallowing:**

Keep respiratory tracts clear. Drink large amounts of water. Induce vomiting. Administer a solution of medical-usage active charcoal. Seek immediate medical assistance. Drink milk neat or mixed with raw eggs.

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

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

As appropriate to the environment.

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

No specific data.

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

Incombustible. In the event of fire, toxic fumes may form:

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

Suitable clothing and footwear.

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

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

Avoid contact with the skin, eyes or clothing. Do not inhale the dust.

#### **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 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. In well ventilated premises. Away from light. Restricted access, only authorized to technicians.

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

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

No special indications.

#### **8.2 Exposure limit control:**

VLA-ED(Hg): 0,025 mg/m<sup>3</sup>

### **8.3 Respiratory protection:**

If dust forms, use suitable respiratory protection. 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.

### **8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

## **9. Physical and chemical properties**

Appearance: solid

Colour: Scarlett-red

Granulometry: N/A

Odour: Odourless.

pH: 6 - 7

Melting point/freezing point: 259 °C

Initial boiling point and boiling range: 354 °C

Flash point:

N/A

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits:

N/A

Vapour pressure: 0,001 hPa (60 °C)

Vapour density: N/A

Relative density:

N/A

Solubility: in Insoluble in water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Viscosity: 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:**

Fluorine. Alkaline metals.

### **10.3 Hazardous decomposition products:**

No specific data.

#### **10.4 Complementary information:**

No specific data.

### **11. Toxicological information**

#### **11.1 Acute toxicity:**

LD L0 oral man : 357 mg/kg

LD50 oral mus : 17 mg/kg

LD50 oral rat : 18 mg/kg

LD50 skn rat : 75 mg/kg

LD50 ipr mus : 4,2 mg/kg

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

Mercury compounds have toxic effects on cells and protoplasms. 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. Can cause 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:**

12.1.1 - EC50 test (mg/l):

Bacteria (Photobacterium phosphoreum) 0,046 mg/l

Classification:

Extr. toxic

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

Classification:

Extr. toxic

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

Classification:

Extr. toxic

Fish (Salmonidae) 0,05 mg/l

Classification:

Extr. toxic

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

Classification:

Extr. toxic

Fish (Leuciscus Idus) 0,013 mg/l

Classification:

Extr. toxic

12.1.2. - Receptor medium:

Risk for the water environment

High

Risk for the land environment

High

12.1.3. - Observations:

The ecotoxicity is due to the mercury ion.

Toxic product in any environment. Ecotoxicity acute and chronic.

## **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 = High

12.3.3. - 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 possible effects on the environment:**

High pollutant product.

Do not allow it to enter soils or water channels.

## **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: MERCURY IODIDE

UN 1638    Class: 6.1    CONTAM. MAR    PELIG.M.AMB    Packaging group: II  
(D/E)

By sea (IMDG):

Technical name: MERCURY IODIDE

UN 1638    Class: 6.1    CONTAM. MAR    PELIG.M.AMB    Packaging group: II

By air (ICAI-IATA):

Technical name: Mercury iodide

UN 1638    Class: 6.1    CONTAM. MAR    PELIG.M.AMB    Packaging group: II

Packaging instructions: CAO 676 PAX 669

## 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

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.

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.

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

R-phrases(s): **R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
**R33** Danger of cumulative effects.  
**R26/27/28** Very toxic by inhalation, in contact with skin and if swallowed.

S-phrases(s): **S60** This material and its container must be disposed of as hazardous waste.  
**S45** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
**S28a** After contact with skin, wash immediately with plenty of water.  
**S13** Keep away from food, drink and animal feedingstuffs.  
**S61** 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.