



## Safety Data Sheet According to Regulation (EU) 830/2015

### 1054 Perchloric Acid 60%

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

##### 1.1 Product identifier

Name:

Perchloric Acid 60%

**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<sup>o</sup> 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)

#### 2. Identification of dangers

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

Ox. Liq. 1

Skin Corr. 1A

## 2.2 Label elements:

### Hazard Pictograms



### Signal word

#### Hazard statements

H271 May cause fire or explosion; strong oxidiser.

H314 Causes severe skin burns and eye damage.

#### 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.

## 2.3 Other hazards:

No further relevant information available.

## 3. Composition/information on ingredients

### 3.1 Substances

Aqueous solution

Name: Perchloric Acid 60%

Formula: HClO<sub>4</sub> M.= 100,46 CAS [7601-90-3]

EC number (EINECS): 231-512-4

EC index number: 017-006-00-4

### 3.2 Mixtures

## 4. First aid measures

### 4.1 Description of first aid measures

Never provide drink or induce vomiting in the event of loss of consciousness.

### 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

### **4.3 Indication of any immediate medical attention and special treatment needed**

#### **Swallowing:**

Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Do not neutralize.

#### **Inhaling:**

Take the person out into the fresh air. In the event sickness persists, seek medical assistance.

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

Wash with plenty of water. Remove contaminated clothing. Seek immediate medical assistance.

#### **Eyes:**

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

## **5. Firefighting measures**

### **5.1 Extinguishing media:**

As appropriate to the environment.

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

Encourages fire to break out. Keep away from combustible substances. Incombustible. In the event of fire, toxic fumes may form: Cl<sub>2</sub>.

### **5.3 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.

### **6.4 Reference to other sections**

Not applicable

## **7. Handling and storage**

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

Keep the workplace and instruments thoroughly clean. Possible formation of explosive perchlorates. Do not allow the product to dry in inaccessible places (e.g.: grooves, tiles, etc.) Limited shelf-life.

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

15 °C Cooled (below Well sealed containers. In well ventilated premises. Store separately or in an enclosure exclusively set aside for substances which are likely to ignite. Away from sources of ignition and heat. Do not store in light-metal containers.

## **7.3 Specific end use(s)**

No more relevant data available

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

## **8.1 Control parameters:**

Data not available.

## **8.2 Exposure controls**

Ensure good ventilation and renewal of the air in the premises.

Respiratory protection:

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

Hand protection:

Use suitable gloves

Eye/face protection:

Use safety glasses.

Individual hygiene measures:

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

Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

# **9. Physical and chemical properties**

## **9.1 Information on basic physical and chemical properties**

Appearance: liquid

Colour: Colourless

Granulometry: N/A

Odour: Odourless.

pH:

N/A

Melting point/freezing point: N/A

Initial boiling point and boiling range: 160 °C

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: (20/4) 1,5298 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

## **9.2 Other information**

No more relevant data available

## **10. Stability and reactivity**

### **10.1 Reactivity**

No specific data.

### **10.2 Chemical stability:**

Hygroscopic.

### **10.3 Possibility of hazardous reactions**

No specific data.

### **10.4 Conditions to avoid:**

High temperatures.

### **10.5 Incompatible materials:**

Halogens. Metals and metal alloys. Metalloids. Semimetallic oxides. Nitriles. Ethers. Sulphoxides. Organic compounds. Reducing agents. Concentrated sulfuric acid. Concentrated sulfuric acid. Organic compounds. Impurities/dust. Flammable substances. Organic solvents. Alcohols. Acids. Anhydrides. Halogen compounds. Non-metal oxides.

### **10.6 Hazardous decomposition products:**

Chlorine.

## **11. Toxicological information**

### **11.1 Information on toxicological effects**

Acute toxicity:

LD50 oral rat : 1.100 mg/kg

Dangerous effects for health:

Very corrosive substance. Upon contact with the skin: burns Through contact with the eyes: burns Risk of blindness (irreversible injury of the optic nerve) If swallowed: Burns in the oesophagus and stomach. Other dangerous characteristics are not discarded.

## **12. Environmental information**

### **12.1 Toxicity:**

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

- **Receptor medium:**

Risk for the water environment

Medium

Risk for the land environment

Low

- **Observations:**

The ecotoxicity is due to the pH deviation.

Acute ecotoxicity in the dumping area.

## **12.2 Persistence and Degradability :**

- **Test:**

- **Biotic degradation classification:**

BOD5/COD

Biodegradability

- **Abiotic degradation depending on pH:**

- **Observations:**

Does not consume oxygen.

## **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:**

Do not allow it to enter soils or water channels.

The treatment is neutralization.

## **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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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**

**14.1 UN number**

UN1873

**14.2 UN proper shipping name**

PERCHLORIC ACID with more than 50% but not more than 72% acid, by mass

**14.3 Transport hazard class(es)**

5.1

8

**14.4 Packing group**

ADR/IMDG: I

IATA: I

**14.5 Environmental hazards****14.6 Special precautions for user**

Not applicable

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable

**15. Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

Not applicable

**16. Other information**

**Other precautionary statements**

P280 Wear protective gloves, protective clothing, eye protection or face protection.

P283 Wear fire/flammable resistant/retardant clothing.

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

P303+P361+P353 IF ON SKIN (or hair): Remove/Remove 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.

P306+P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

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.

P371+P380+P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

P405 Store locked up.

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In respect of the previous review, changes have been made to the following sections: 1,2,4,5,6,7,8,9,10,11,13,14,15

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.