

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



**2175 Perchloric Acid 70%**

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

**1.1 Identification of the substance or preparation**

Name:

Perchloric Acid 70%

**Synonym:**

**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

**2. Identification of dangers**

Classification of the substance or the mixture.

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

Ox. Liq. 1

Skin Corr. 1A

**Hazard Pictograms**



**Signal word**

Danger

**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/sparks/open flames/hot surfaces. 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.

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

<b>C</b>	Corrosive	R35
<b>O</b>	Oxidizing	R8
		R5

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

**3. Component Composition/Information**

Aqueous solution

Name: Perchloric Acid 70%

Formula:  $\text{HClO}_4$  M.= 100,46 CAS [7601-90-3]

EC number (EINECS): 231-512-4

EC index number: 017-006-00-4

**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 sickness persists, seek medical assistance.

**4.3 Contact with the skin:**

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

**4.4 Eyes:**

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

**4.5 Swallowing:**

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

## **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:**

Encourages fire to break out. Keep away from combustible substances.

Incombustible. In the event of fire, toxic fumes may form: Cl<sub>2</sub>.

### **5.4 Protective equipment:**

Suitable clothing and footwear.

## **6. 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.

## **7. Handling and storage**

### **7.1 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 Storage:**

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.

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

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

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

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

: Data not available.

### **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 protection:**

Use suitable goggles.

**8.6 Individual hygiene measures:**

Use complete protective equipment. Remove contaminated 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: Odourless.

pH:

N/A

Melting point/freezing point: -18 °C

Initial boiling point and boiling range: 198 °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) 1,668

Solubility: Miscible with 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:**

High temperatures.

**10.2 Matter which should be avoided:**

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.

**10.3 Hazardous decomposition products:**

Chlorine.

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

Hygroscopic.

### **11. Toxicological information**

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

LD50 oral rat : 1.100 mg/kg

#### **11.2 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:**

12.1.1 - EC50 test (mg/l):

Classification:

12.1.2. - Receptor medium:

Risk for the water environment

Medium

Risk for the land environment

Low

12.1.3. - Observations:

The ecotoxicity is due to the pH deviation.

Acute ecotoxicity in the dumping area.

#### **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:

Does not consume oxygene.

#### **12.3 Bioaccumulative potential:**

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

Non-bioaccumulable product.

#### **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.

The treatment is neutralization.

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

UN 1873 Class: 5.1 8 Packaging group: I (B/E)

By sea (IMDG):

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

UN 1873 Class: 5.1 8 Packaging group: I

By air (ICAI-IATA):

Technical name: Perchloric acid

UN 1873 Class: 5.1 8 Packaging group: I

Packaging instructions: CAO 553 PAX F

## **15. Regulatory information**

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

## **16. Other information**

### Other precautionary statements

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

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

R-phrases(s):	<b>R35</b> Causes severe burns. <b>R8</b> Contact with combustible material may cause fire. <b>R5</b> Heating may cause an explosion.
S-phrases(s):	<b>S45</b> In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). <b>S36</b> Wear suitable protective clothing. <b>S26</b> In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. <b>S23c</b> Do not breathe vapour.

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.