S a f e t y D a t a S h e e t

According to Regulation (EC) 1907/2006

3163 **Sulphuric Acid 98%**

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

1.1 Identification of the substance or preparation

Name:

Sulphuric Acid 98%

1.2 Synonym:

1.3 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.4 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

Emergencies:

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) nº 1272/2008.

Skin Corr. 1A

Hazard Pictograms

Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

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

P264 Wash...thoroughly after handling.

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

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

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

C CorrosiveR35

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

Component Composition/Information

Name: Sulphuric Acid 98%

Formula: H2SO4 M.= 98,08 CAS [7664-93-9]

EC number (EINECS): 231-639-5

EC index number: 016-020-00-8

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. In the event of irritation, seek medical assistance. 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 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.

Fire-fighting means

5.1 Suitable fire-extinguishing means:
As appropriate to the environment.

5.2 Fire-fighting means which must NOT be used:

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

5.4 Protective equipment:
Suitable clothing and footwear. Self-contained breathing equipment.

Measures to be taken in the event of accidental spillage

6.1 Individual precautions:
Do not inhale the fumes. Avoid contact with the skin, eyes or clothing. Ensure adequate ventilation.

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 diluted sodium hydroxide.

Handling and storage

7.1 Handling:
No special indications.

7.2 Storage:
Well sealed containers.In well ventilated premises.Atmospheric temperature.Do not store in metal containers.

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:
VLA-EC: 3 mg/m3
VLA-ED: 1 mg/m3

8.3 Respiratory protection:
In the event of fumes forming/aerosols, use suitable respiratory protection. Filter P.

8.4 Hand protection:
Use suitable gloves neopren PVC

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.

8.7 Environmental exposure controls:
Fulfill the commitments under local environmental protection legislation.

Physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry:

Odour: Characteristic.

pH:

Melting point/freezing point: -15 °C

Initial boiling point and boiling range: 330 °C

Flash point:

Flammability (solid, gas):

Upper/lower flammability or explosive limits:

Vapour pressure:

Vapour density:

Relative density: (20/4) 1,84
Solubility: Miscible with water
Partition coefficient: n-octanol/water:
Auto-ignition temperature:
Decomposition temperature:
Viscosity:

Stability and reactivity

10.1 Conditions which should be avoided:

10.2 Matter which should be avoided:

Water. (Caution! Heat is generated). Alkaline compounds. Alkaline metals. Ammonia. Alkali-earth compounds. Alkaline solutions. Acids. Metals and metal alloys. Phosphorus. Phosphorus Oxides. Hydrides. Halogen halides. Salts of oxyhalogenic acids. Nitrates. Carbides. Organic solvents. Flammable substances. Acetylides. Nitriles. Nitrogen organic compounds. Anilines. Peroxides. Picrates. Nitrides. Lithium silicide.

10.3 Hazardous decomposition products:

Toxic gases.

10.4 Complementary information:

Hygroscopic. Corrosive.

Toxicological information

- **Acute toxicity:**

LD50 oral rat : 2.150 mg/kg
LC50 inh rat : 510 mg/m3 2h

- **Dangerous effects for health:**

If fumes inhaled: Irritations to the respiratory tracts. Very corrosive substance. Upon contact with the skin: Causes burns Through contact with the eyes: burns blindness (irreversible injury of the optic nerve) If swallowed: Burns in the digestive apparatus Severe pains, with risk of perforation. Can cause nausea vomiting diarrhoea After a period of latency: pylorostenosis.

Environmental information

12.1 Mobility:

12.2 Ecotoxicity:

12.1.1 - EC50 test (mg/l):

Water organisms 10 mg/l (96h)

Classification:

Extr. toxic

Fish

(For sulphuric ac.) 1,2 mg/l

Classification:

Extr. toxic

Fish

(For sodium sulphate) 7000 mg/l

Classification:

Toxic

Bacteria

(For sodium sulphate) 2500 mg/l

Classification:

Very toxic

12.2.2 - Receptor medium:

Risk for the water environment

High

Risk for the land environment

Medium

12.2.3 - Observations:

Extremely toxic for fish. The ecotoxicity is due to the pH deviation and the formation of sodium sulphate.

12.3 Degradability:

12.3.1 - Test:

12.3.2 - Biotic degradation classification:

BOD5/COD

Biodegradability

12.3.3 - Abiotic degradation depending on pH:

12.3.4 - Observations:

12.4 Accumulation:

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk

12.4.3 - Observations:

12.5 Other possible effects on the environment:

Neutralize with NaOH at pH 7.

Highly corrosive product.

There is danger in the event of uncontrolled dumping (in either rivers or water channels).

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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Information concerning transport

Overland (ADR):
Technical name: SULPHURIC ACID with more than 51% acid
UN 1830 Class: 8 Packaging group: II (E)

By sea (IMDG):
Technical name: SULPHURIC ACID with more than 51% acid
UN 1830 Class: 8 Packaging group: II

By air (ICAI-IATA):
Technical name: Sulphuric acid
UN 1830 Class: 8 Packaging group: II

Packaging instructions: CAO 813 PAX 809

Regulatory information

The substance is subject to Regulation (EC) No 273/2004 of the European Parliament and of the Council, of 11 February 2004 on drug precursors, Council Regulation (EC) No 111/2005 of 22 December 2004 laying down rules for the monitoring of trade between the Community and third countries in drug precursors, Commission Regulation (EC) No 1277/2005 of 27 July 2005 laying down implementing rules for Regulation (EC) No 273/2004 of the European Parliament and of the Council on drug precursors and for Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors.

Other information

Other precautionary statements

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.

P405 Store locked up.

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

R-phrase(s):	**R35** Causes severe burns.
S-phrase(s):	**S45** In case of accident or if you feel unwell, seek medical advice immediately (show the lable where possible). **S30** Never add water to this product. **S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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.