

# S a f e t y   D a t a   S h e e t

## According to Regulation (EC) 1907/2006



### 4568 Fehling's A Reagent

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

##### **1.1 Product identifier**

Name:

Fehling's A Reagent

##### **Synonym:**

Alkaline cupric solution

**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

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.**

Aquatic Chronic 2

## Hazard Pictograms



## Signal word

### Hazard statements

H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

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

R51

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

## 3. Composition/information on ingredients

Name: Fehling's A Reagent

### Composition:

#### 0001: Sulphuric Acid 93-98%

Formula:  $\text{H}_2\text{SO}_4$  M.= 98,08 CAS [7664-93-9]

EC number (EINECS): 231-639-5

EC index number: 016-020-00-8

REACH Registration Number: 01-2119458838-20-XXXX

**Content:**  $\leq 0,5 \%$

## Classification Regulation (CE) n° 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 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.

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

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.

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

**C** Corrosive

**R35** Causes severe burns.

**0002: Copper(II) Sulphate 5-hydrate**

Formula:  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  M.= 249,68 CAS [7758-99-8]

EC number (EINECS): 231-847-6

EC index number: 029-004-00-0

REACH Registration Number: 01-2119520566-40-XXXX

**Content:**  $\geq 1 \%$   $\leq 10 \%$

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

Acute Tox. 4

Eye Irrit. 2

Skin Irrit. 2

Aquatic Acute 1

Aquatic Chronic 1

**Hazard Pictograms****Signal word**

Warning

### **Hazard statements**

H302 Harmful if swallowed.  
H319 Causes serious eye irritation.  
H315 Causes skin irritation.  
H410 Very toxic to aquatic life with long lasting effects.

### **Precautionary statements**

P264 Wash...thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.  
P280 Wear protective gloves, protective clothing, eye protection or face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment (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.  
P391 Collect spillage.

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

**N** Dangerous for the environment  
**Xn** Harmful

**R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
**R36/38** Irritating to eyes and skin.  
**R22** Harmful 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. In the event sickness persists, seek medical assistance.

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

Wash with plenty of water. Remove contaminated clothing.

### **4.4 Eyes:**

Wash with plenty of water, keeping eyelids open.

### **4.5 Swallowing:**

Drink large amounts of water. Induce vomiting. In the event of sickness, seek medical assistance.

## **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.

**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:**

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.

**8. Exposure controls/personal protection****8.1 Exposure controls:**

No special indications.

**8.2 Control parameters:**

: 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/face protection:**

Use suitable goggles.

**8.6 Individual hygiene measures:**

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: N/A

Colour:

N/A

Granulometry: N/A

Odour: Characteristic.

pH:

N/A

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:

N/A

Solubility: in ( ) 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:**

The product is chemically stable under standard ambient conditions (room temperature).

### **10.2 Incompatible materials:**

Hydroxylamine.

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

No specific data.

### **10.4 Chemical stability:**

No specific data.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

: Data not available.

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

If fumes inhaled: Irritations to the mucosae coughing breathing difficulties Upon contact with the skin: irritations Through contact with the eyes: irritations Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## **12. Environmental information**

### **12.1 Toxicity:**

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

Bacteria (Photobacterium phosphoreum) (Cu) 0,27 mg/l.

Extr. toxic

Bacteria (Cu) 1 mg/l

Classification: Extr. toxic

Algae (Cu) 1 mg/l

Classification: Extr. toxic

Protozoa: (Cu) 1 mg/l

Classification: Extr. toxic

Fish (Cu) 1 mg/l

Classification: Extr. toxic

Fish (C. auratus) (Cu) 0,01 mg/l

Classification: Extr. toxic

Bivalves. (Cu) 0,55 mg/l

Classification: Extr. toxic

Oysters. (Cu) 0,1 mg/l

Classification: Extr. toxic

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

Risk for the water environment

High

Risk for the land environment

Medium

#### **- Observations:**

Highly toxic throughout the trophic chain.

Major ecotoxic effect in water environments.

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

#### **- Test:**

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

BOD5/COD

Biodegradability

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

#### **- Observations:**

### **12.3 Bioaccumulative potential:**

#### **- Test:**

#### **- Bioaccumulation:**

Risk

#### **- Observations:**

### **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.

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: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

UN 3082 Class: 9 CONTAM. MAR Packaging group: III (E)

By sea (IMDG):

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

UN 3082 Class: 9 CONTAM. MAR Packaging group: III

By air (ICAI-IATA):

Technical name: Environmentally hazardous substance, liquid, n.o.s.

UN 3082 Class: 9 CONTAM. MAR Packaging group: III

Packaging instructions: CAO 964 PAX 964

## 15. Regulatory information

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

## 16. Other information

### Other precautionary statements

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

R-phrases(s): **R51** Toxic to aquatic organisms.

S-phrases(s): **S61** Avoid release to the environment. Refer to special instructions/safety data sheets.



Version and revision 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.