



## Safety Data Sheet

According to Regulation (EC) 1907/2006



1550 Benedict's Reagent \*qualitative

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

## 1.1 Identification of the substance or preparation

Name:

Benedict's Reagent \*qualitative

**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

# Identification of dangers

Classification of the substance or the mixture.

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

Aquatic Chronic 3

**Hazard Pictograms**

**Signal word**

**Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P273 Avoid release to the environment.

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

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

R52

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

# Component Composition/Information

Name: Benedict's Reagent \*qualitative

**Composition:**

**0001: 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

**Content:**  $\geq 1 \%$   $\leq 5 \%$

**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/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 **R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Xn** Harmful **R36/38** Irritating to eyes and skin.

**R22** Harmful if swallowed.

## 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.

### 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.

## 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.

### 5.4 Protective equipment:

Suitable clothing and footwear.

## 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:

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.

## Handling and storage

### 7.1 Handling:

No special indications.

### 7.2 Storage:

Well sealed containers.

## Staff exposure/protection controls

### 8.1 Technical protective measures:

No special indications.

**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:**

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.

## Physical and chemical properties

Appearance: liquid

Colour: Dark blue

Granulometry: N/A

Odour: Odourless.

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: (20/4) 1,153

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Viscosity: N/A

## 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:

No specific data.

### 10.3 Hazardous decomposition products:

No specific data.

### 10.4 Complementary information:

No specific data.

## Toxicological information

- **Acute toxicity:**

: Data not available.

- **Dangerous effects for health:**

No specific data on this preparation known with regard to effects of overdose in humans. Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## Environmental information

## **12.1 Toxicity:**

12.1.1 - 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

12.1.2. - Receptor medium:

Risk for the water environment

High

Risk for the land environment

Medium

12.1.3. - Observations:

Highly toxic throughout the trophic chain.

Major ecotoxic effect in water environments.

## **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

12.3.3. - Observations:

## **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.

DATA BASED on the components of the preparation.

(Soluble copper compounds)

## 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.

### 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.

## Information concerning transport

Not classified as dangerous in the meaning of transport regulations.

## Regulatory information

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

## Other information

### Other precautionary statements

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

R-phrases(s):	<b>R52</b> Harmful to aquatic organisms.
---------------	--

S-phrases(s):	
---------------	--



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.