



## Safety Data Sheet

According to Regulation (EC) 1907/2006  
and (EU) 453/2010

### 3462 Ferroin indicator solution

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

##### 1.1 Product identifier

Name:

Ferroin indicator solution

##### Synonym:

1,10-Phenanthroline-Iron(II) Sulphate Complex, Tris (1,10-Phenanthroline) Iron(II) Sulphate

**CAS:** [14634-91-4]

**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

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

## **Classification Regulation (CE) nº 1272/2008.**

Acute Tox. 4

Aquatic Chronic 3

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

**Xn** Harmful

R52

R22

### **2.2 Label elements:**

#### **Hazard Pictograms**



#### **Signal word**

Warning

#### **Hazard statements**

H302 Harmful if swallowed.

H412 Harmful 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.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

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

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

### **2.3 Other hazards:**

No further relevant information available.

## **3. Composition/information on ingredients**

Name: Ferroin indicator solution

Formula:  $\text{C}_{36}\text{H}_{24}\text{FeN}_6\text{O}_4\text{S}$  M.= 692,24 CAS [14634-91-4]

EC number (EINECS): 238-676-6

## **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.

#### **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. Call for medical help.

### **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:**

No special indications.

#### **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.

### **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 safety glasses.

**8.6 Individual hygiene measures:**

Remove contaminated clothing. Use suitable work clothing. Wash hands 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: Odourless.

pH: 2,5 ((50 g/l))

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:

Insertar Aquí Grupo de repetición

(20/4) 1,008 g/ml

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:**

No specific data.

**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:**

No specific data on this product known with regard to effects of overdose in humans. No dangerous characteristics are to be anticipated. Take the usual precautions for handling chemical products.

**12. Environmental information****12.1 Toxicity:**

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

- **Receptor medium:**

Risk for the water environment

Risk for the land environment

- **Observations:**

**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:**

If suitable handling conditions are maintained, no ecological problems are to be anticipated.

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

Not classified as dangerous in the meaning of transport regulations.

## 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-phrase(s):     **R52** Harmful to aquatic organisms.  
                      **R22** Harmful if swallowed.

S-phrase(s):     **S45** In case of accident or if you feel unwell,  
                      seek medical advice immediately (show the label  
                      where possible).

Version and revision date : 4 16.12.2013

Remplaced: 03.11.2010

In respect of the previous review, changes have been made to the following sections: 1

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.