



## 5443 Redox Standard 220 mV \*(25°C)

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

#### 1.1 Identification of the substance or preparation

Name:

Redox Standard 220 mV \*(25°C)

**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.

**No hazardous mixture as specified in Regulation (CE) 1272/2008.**

**No hazardous mixture as specified in Classification (67/548/CEE or 1999/45/CE).**

### 3. Component Composition/Information

Name: Redox Standard 220 mV \*(25°C)

## **Composition:**

### **0001: Potassium Hexacyanoferrate(II) 3-hydrate**

Formula:  $K_4Fe(CN)_6 \cdot 3H_2O$  M.= 422,41 CAS [14459-95-1]

EC number (EINECS): 237-722-2

**Content:**  $\geq 0,1 \%$   $\leq 0,5 \%$

**No hazardous substance as specified in Regulation (CE) 1272/2008.  
No hazardous substance as specified in Classification (67/548/CEE or 1999/45/CE).**

## **4. First aid**

### **4.1 General indications:**

Never provide drink or induce vomiting in the event of loss of consciousness.

### **4.2 Inhaling:**

Go 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. In the event of sickness, seek medical assistance.

## **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:**

Incombustible.

### **5.4 Protective equipment:**

Suitable clothing and footwear.

## **6. Measures to be taken in the event of accidental spillage**

### **6.1 Individual precautions:**

No special indications.

### **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.

## **7. Handling and storage**

### **7.1 Handling:**

No special indications.

### **7.2 Storage:**

Well sealed containers.

## **8. 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 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: yellow or greenish yellow

Granulometry: N/A

Odour: N/A

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) 1,004  
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:**

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.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

: Data not available.

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

No specific data on this preparation known with regard to effects of overdose in humans. Taking the preparation' components into account, the likely dangerous characteristics are as follows: Through contact with the eyes: Can cause irritations  
Take the usual precautions for handling chemical products.

## **12. Environmental information**

### **12.1 Toxicity:**

12.1.1 - EC50 test (mg/l):

12.1.2. - Receptor medium:

Risk for the water environment

Risk for the land environment

12.1.3. - Observations:

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

12.2.1 - Test:

BOD5

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:**

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

## **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**

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**

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.

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

Date published: 3.11.10

Review number and date: 3 3.11.10

