

Safety Data Sheet

According to Regulation (EC) 1907/2006



A721 Barium Oxide

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

### 1.1 Identification of the substance or preparation

Name:

Barium Oxide

### 1.2 Synonym:

Barium Monoxide, Barium Protoxide, Calcined Baryta

### 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](mailto: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) n° 1272/2008.**

Acute Tox. 4

Acute Tox. 4

Eye Irrit. 2

Skin Irrit. 2

**Hazard Pictograms**



**Signal word**

Warning

**Hazard statements**

H332 Harmful if inhaled.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash...thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

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

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

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

R36/38

Xn Harmful R22

R20

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

# Component Composition/Information

Name: Barium Oxide

Formula: BaO M.= 153,34 CAS [1304-28-5]

EC number (EINECS): 215-127-9

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

### 4.5 Swallowing:

Drink large amounts of water. Drink large amounts of water. Induce vomiting. Induce vomiting. Seek immediate medical assistance. Seek immediate 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:

### 5.3 Special risks:

Incombustible.

### 5.4 Protective equipment:

## Measures to be taken in the event of accidental spillage

### 6.1 Individual precautions:

Do not inhale the dust.

### 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 dry 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. Dry atmosphere. Atmospheric temperature.

# Staff exposure/protection controls

## 8.1 Technical protective measures:

## 8.2 Exposure limit control:

TLV-TWA(Ba): 0,5 mg/m<sup>3</sup>

CEE(Ba): 0,5 mg/m<sup>3</sup>

## 8.3 Respiratory protection:

If dust forms, 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. 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.

# Physical and chemical properties

Appearance: solid

Colour: White

Granulometry:

Odour: Odourless.

pH:

Melting point/freezing point: ~1.920 °C

Initial boiling point and boiling range:

Flash point:

Flammability (solid, gas):

Upper/lower flammability or explosive limits:

Vapour pressure:

Vapour density:

Relative density: 5,7

Solubility: Soluble in 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:**

Acids. Acetic anhydride. Reducing agents. Hydroxylamine. Anhydrides.

**10.3 Hazardous decomposition products:**

**10.4 Complementary information:**

## Toxicological information

- **Acute toxicity:**

- **Dangerous effects for health:**

If inhaled: Irritations to the respiratory tracts. Upon contact with the skin: irritations Through contact with the eyes: irritations If swallowed: Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. Can cause nausea vomiting diarrhoea Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## Environmental information

**12.1 Mobility:**

## **12.2 Ecotoxicity:**

12.1.1 - EC50 test (mg/l):

Algae (*Sc. quadricauda*) 34 mg/l

Classification:

Extr. toxic

Crustaceans (*Daphnia magna*) 29 mg/l

Classification:

Extr. toxic

Fish (*Salmo gairdneri*) Ba. 158 mg/l

Classification: Highly toxic

Fish (*Leuciscus Idus*) Ba. 870 mg/l

Classification: Highly toxic

12.2.2 - Receptor medium:

Risk for the water environment

High

Risk for the land environment

Medium

12.2.3 - Observations:

The ecotoxicity is due to the ion Ba.

## **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:**

Dangerous for drinking water.

Do not allow it to enter soils 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.

### **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**

Overland (ADR):

Technical name: BARIUM OXIDE

UN 1884 Class: 6.1 Packaging group: III (E)

By sea (IMDG):

Technical name: BARIUM OXIDE

UN 1884 Class: 6.1 Packaging group: III

By air (ICAI-IATA):

Technical name: Barium oxide

UN 1884 Class: 6.1 Packaging group: III

Packaging instructions: CAO 619 PAX 619

## **Regulatory information**

## **Other information**

**Other precautionary statements**

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

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

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.

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

R-phrases(s):	<b>R36/38</b> Irritating to eyes and skin. <b>R22</b> Harmful if swallowed. <b>R20</b> Harmful by inhalation.
S-phrases(s):	<b>S26</b> In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

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