

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifiers**Product name: **BARIUM NITRATE**CAS-No.: **10022-31-8**Product Number: **A66084****1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: Laboratory chemicals, Manufacture of substances

**1.3 Details of the supplier of the safety data sheet**Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,  
UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

**1.4 Emergency telephone number**Emergency Phone #: **+44 (0)845 1200 506****2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**Oxidizing solids (Category 2); Acute toxicity, Inhalation (Category 4); Acute toxicity, Oral (Category 4);  
Eye irritation (Category 2)**According to European Directive 67/548/EEC as amended.**

Contact with combustible material may cause fire. Harmful by inhalation and if swallowed.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008 [CLP]**

Pictogram



Signal word

Danger

**Hazard statement(s)**

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

**Precautionary statement(s)**

P220 Keep/Store away from clothing/ combustible materials.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Hazard symbol(s)**

O Oxidising

Xn Harmful

**R-phrase(s)**

R 8 Contact with combustible material may cause fire.

R20/22 Harmful by inhalation and if swallowed.

**S-phrase(s)**

S28 After contact with skin, wash immediately with plenty of soap and water.

**2.3 Other hazards** – none

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances****Barium nitrate**

Formula:	Ba(NO <sub>3</sub> ) <sub>2</sub>
Molecular Weight:	261.34g/mol
CAS-No.:	10022-31-8
EC-No.:	233-020-5
Index-No.:	056-002-00-7

**4. FIRST AID MEASURES****4.1 Description of first aid measures****General advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:**

Wash off with soap and plenty of water.

**In case of eye contact:**

Rinse thoroughly with plenty of water for at least 15 minutes

**If swallowed:**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed**

no data available

**4.3 Indication of immediate medical attention and special treatment needed**

no data available

## **5. FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **5.2 Special hazards arising from the substance or mixture**

no data available

### **5.3 Precautions for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

### **5.4 Further information**

Use water spray to cool unopened containers.

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### **6.2 Environmental precautions**

Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see section 13.

## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

### **7.3 Specific end uses**

no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Update
Barium nitrate	10022-31-8	TWA	0.5mg/m <sup>3</sup>	1991-07-01
Barium nitrate	10022-31-8	TWA	0.5mg/m <sup>3</sup>	1991-01-01

Europe Commission Directive 91/322/EEC on establishing indicative limit values. Remarks Indicative.  
UK. EH40 WEL - Workplace Exposure Limits Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - rat - 390 mg/kg; Remarks: Behavioural: Somnolence (general depressed activity).

LD50 Oral - Mammal - 390 mg/kg; Remarks: Behavioural: Muscle weakness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

#### **Skin corrosion/irritation**

Skin - rabbit - Mild skin irritation - Draize Test

#### **Serious eye damage/eye irritation**

Eyes - rabbit - Moderate eye irritation - Draize Test

#### **Respiratory or skin sensitization**

no data available

#### **Germ cell mutagenicity**

no data available

#### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

no data available

#### **Specific target organ toxicity - single exposure**

no data available

#### **Specific target organ toxicity - repeated exposure**

no data available

#### **Aspiration hazard**

no data available

#### **Potential health effects**

**Inhalation** Harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** Harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** Causes serious eye irritation.

#### **Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Additional Information**

RTECS: CQ9625000

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

no data available

### **12.2 Persistence and degradability**

no data available

### **12.3 Bioaccumulative potential**

no data available

### **12.4 Mobility in soil**

no data available

### **12.5 Results of PBT and vPvB assessment**

no data available

### **12.6 Other adverse effects**

no data available

## **13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### **Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### 14.1 UN-Number

ADR/RID: 1446 IMDG: 1446 IATA: 1446

### 14.2 UN proper shipping name

ADR/RID: BARIUM NITRATE

IMDG: BARIUM NITRATE

IATA: BARIUM NITRATE

### 14.3 Transport hazard class(es)

ADR/RID: 5.1 (6.1) IMDG: 5.1 (6.1) IATA: 5.1 (6.1)

### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for users

EMS-No: F-A, S-Q

## 15. REGULATORY INFORMATION

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

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

### 15.2 Chemical Safety Assessment

no data available

## 16. OTHER INFORMATION

### Text of H-code(s) and R-phrase(s)

Acute Tox. Acute toxicity

Eye Irrit. Eye irritation

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

Ox. Sol. Oxidizing solids

O Oxidising

Xn Harmful

R 8 Contact with combustible material may cause fire.

R20/22 Harmful by inhalation and if swallowed.