

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name Barium Nitrate 65 g/L Solution

CAS number 10022-31-8

Synonyms None

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Industrial, Manufacturing, or Laboratory use

#### 1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

#### 1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing solids (Category 2)

Acute toxicity, Oral (Category 4)

Acute toxicity, Inhalation (Category 4)

Skin irritation

Eye irritation (Category 2A)

#### 2.2 GHS Label elements, including precautionary statements

**Pictogram****Signal Word**

Danger

**Hazard statements**

May intensify fire; oxidizer  
 Harmful if swallowed or in contact with skin  
 Causes mild skin irritation  
 Causes serious eye irritation  
 Keep/store away from clothing/combustible materials  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**Precaution statements**

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep/store away from clothing/other combustible materials  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Take any precaution to avoid mixing with combustibles  
 Wear protective gloves/protective clothing/eye protection/face protection

**Inhalation** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for  
 Call a POISON CENTER or doctor/physician if you feel unwell

**Eyes** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing if eye irritation persists: Get medical

**Ingestion** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth

**Fire** In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Storage** Store locked up

**Disposal** Dispose of contents/container to an approved waste disposal plant

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

None identified

**SECTION 3: Composition/information on ingredients****3.1 Components**

Chemical name	Common name and synonyms	CAS number	Concentration
Barium nitrate	-	10022-31-8	6.43-6.7%
Water	-	10022-31-8	93%

**SECTION 4: First aid measures****4.1 Description of first-aid measures**

## General advice

<b>If inhaled</b>	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>In case of eye contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>If swallowed</b>	Do NOT induce vomiting. Call a physician or poison control center immediately.

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

None reasonably foreseeable

### 4.3 Indication of any immediate medical attention and special treatment needed

No information available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. Water mist may be used to cool closed containers.
<b>Unsuitable extinguishing media</b>	No information available

### 5.2 Specific hazards arising from the substance or mixture

Non-combustible. Oxidizer: Contact with combustible/organic material may cause fire. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. May ignite combustibles (wood, paper, oil, clothing, etc.).

### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### 5.4 Further information

<b>Flash Point</b>	Nitrogen oxides (NO <sub>x</sub> )
<b>Autoignition Temperature</b>	No information available
<b>Explosion limits</b>	

**Upper** No information available  
**Lower** No information available  
**Sensitivity to Mechanical Impact** No information available  
**Sensitivity to Static Discharge** No information available  
**NFPA**

Health	Flammability	Instability	Physical hazards
3	0	2	OX

## SECTION 6: Accidental release measures

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

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

### 6.2 Environmental precautions

Should not be released into the environment. See section 12 for additional Ecological information.

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

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.

### 6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. Keep away from clothing and other combustible materials.

#### Hygiene measures

Handle in accordance with good industrial hygiene practices.

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

#### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near

#### Incompatibilities

Organic materials. Acids. Bases. Acid anhydrides. Metals. Reducing agents. Strong reducing agents. Combustible material.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Barium nitrate	TWA	0.5 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Barium nitrate	TWA	0.5 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Barium nitrate	IDLH	50 mg/m <sup>3</sup>
	TWA	0.5 mg/m <sup>3</sup>

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

##### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

##### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

##### Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Odorless
Odor Threshold	No information available
pH	5.0-8.0 5% aq.sol. (20°C)
Melting Point/Range	592 °C / 1097.6 °F
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	Ba N2 O6
Molecular Weight	261.34
VOC Content(%)	No information available
Oxidizing properties	No information available

## 9.2 Other safety information

No information available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Yes

### 10.2 Chemical stability

Oxidizer: Contact with combustible/organic material may cause fire.

### 10.3 Possibility of hazardous reactions

None under normal processing

### 10.4 Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat. Combustible material.

### 10.5 Incompatible materials

Organic materials, Acids, Bases, Acid anhydrides, Metals, Reducing Agent, Strong reducing agents, Combustible material.

### 10.6 Hazardous decomposition products

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Product Information, Component Information**

**Acute toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Barium nitrate	50-300 mg/kg	-	>1.1 mg/L - 243 min

**Skin corrosion/irritation**

Irritating to eyes

**Serious eye damage/eye irritation**

No information available

**Respiratory or skin sensitization**

No information available

**Germ cell mutagenicity**

No information available

**Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Barium nitrate	10022-31-8	Not listed	Not listed	Not listed	Not listed	Not listed
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed

**Specific target organ toxicity - single exposure**

None known

**Specific target organ toxicity - repeated exposure**

None known

**Reproductive toxicity**

No information available

**Chronic effects**

No information available

**11.2 Additional Information**

No information available

**SECTION 12: Ecological information**

**12.1 Toxicity**

Do not empty into drains.

## 12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available

## 12.3 Bio accumulative potential

No information available

## 12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility

## 12.5 Results of PBT and vPvB assessment

No information available

## 12.6 Endocrine disrupting properties

No information available

## 12.7 Other adverse effects

No information available

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### DOT (US)

UN-no.	UN1446
Proper Shipping Name	BARIUM NITRATE
Hazard Class	5.1
Subsidiary Hazard Class	6.1
Packing Group	II

### IMDG

UN-no.	UN1446
Proper Shipping Name	BARIUM NITRATE
Hazard Class	5.1
Subsidiary Hazard Class	6.1
Packing Group	II

### IATA

UN-no.	UN1446
Proper Shipping Name	BARIUM NITRATE
Hazard Class	5.1
Subsidiary Hazard Class	6.1
Packing Group	II



## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not applicable

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not applicable

**SARA 304 Emergency release notification**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See section 2 for full list of applicable hazards.

**SARA 313 (TRI reporting)**

Listed - Threshold Values: 1.0

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not applicable

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not applicable

**Safe Drinking Water Act**

No information available

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed

**US. New Jersey Worker and Community Right-to-Know Act**

Listed

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed

**California Proposition 65**  
Not listed

**SECTION 16: Other information**

Issue date: 07/15/2024

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.