



Barium Nitrate

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name:	Barium Nitrate
CAS Number:	10022-31-8
EC Number:	233-020-5

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

Identified use: Laboratory chemicals, manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company name:	East Harbour Group Ltd 20 Clough Road, Severalls Industrial Park Colchester, Essex, CO4 9QS United Kingdom
Telephone:	+44 (0) 333 242 0100
Email:	info@eastharbourgroup.com

1.4 Emergency telephone number

Emergency telephone:	0800 246 1274
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Section 2: Hazardous identification

2.1 Classification of the substance or mixture

Signal word: DANGER

2.2 Label elements

Strong oxidiser. Contact with other material may cause a fire. Harmful if inhaled or swallowed. Causes eye, skin and respiratory tract irritation. May cause central nervous system effects. May cause kidney damage. May cause cardiac disturbances.

2.3 Other hazards

Target organs: kidneys, central nervous system, muscles, cardiovascular system.

Section 3: Composition/information on ingredients



Barium Nitrate

3.2 Mixtures

CAS #	Content (W/W)	Ingredients
10022-31-8	100%	Barium Nitrate

Chemical name: Barium Nitrate

Common name / synonyms: Barium Nitrate

Section 4: First aid measures

4.1 Description of first aid measures

In case of skin contact: Flush skin with plenty of water for at least 15 minutes while

In case of eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

If swallowed: Call a poison control centre. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

If inhaled: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Section 5: Fire-fighting measures

5.1 Fire Fighting Media and Instructions:

Use water spray to cool fire-exposed containers. Contact professional fire-fighters immediately. For small fires, do NOT use dry chemicals, carbon dioxide, halon or foams. USE WATER ONLY. For large fires, flood fire area with water from a distance.

5.2 Special hazards arising from the substance or mixture

No information available

5.3 Advice for firefighters

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with other material may cause fire.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use proper personal protective equipment as indicated.

6.2 Environmental precautions



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Avoid run off into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions

6.3 Methods and material for containment and cleaning up

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not use combustible materials such as paper towels to clean up spill.

Section 7: Handling and storage

7.1 Precautions for safe handling

Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Do not get on skin or in eyes. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks, and flame. Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from reducing agents.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs
Barium Nitrate	0.5 mg/m ³ TWA (as Ba) (listed under Barium, soluble compounds)	0.5 mg/m ³ TWA (as Ba) 50 mg/m ³ IDLH (as Ba)	0.5 mg/m ³ TWA (as Ba) (listed under Barium, soluble compounds)

8.2 Exposure controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

8.3 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 gloves 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.



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Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	White
Physical State	Crystals
Odor	Odourless
Odor Threshold	No information available
pH	5.0-8.0, 5% Aq. Soln.
Melting Point/Range	592 C
Boiling Point/Range	Decomposes
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Explosion Limits	No information available
Vapor Pressure	Negligible
Vapor Density	9.0
Specific Gravity / Density	3.24 @23C
Bulk Density	No information available
Water Solubility	No information available
Solubility in other solvents	Moderate
Partition Coefficient	No information available
Auto-ignition temperature	No information available
Decomposition temperature	>592 C

Section 10: Stability and Reactivity

10.1 Reactivity	No information available
10.2 Chemical Stability	Stable under normal temperatures and pressures
10.3 Possibility of hazardous reactions	No information available
10.4 Conditions to avoid	Dust generation
10.5 Incompatible materials	Reducing agents, acids, bases, aluminum, hydroxylamine, magnesium, phosphorus, zinc, esters (e.g. butyl acetate, ethyl acetate, propyl formate), combustible and flammable materials (e.g. alkyl resins, asphalt, gasoline, grease, methyl acetone, polystyrene, polyurethane), acid anhydrides, tin chloride.
10.6 Hazardous decomposition products	Nitrogen oxides, barium oxide



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Section 11: Toxicological Information

Product Information

11.1 Toxicological effects:

RTECS:

LD50/LC50:

Draize test, rabbit, eye: 100 mg/24H Moderate

Draize test, rabbit, skin: 500 mg/24H Mild

Oral, mouse: LD50: 266 mg/kg

Oral, rat: LD50: 55 mg/kg

Oral, rat: LD50: 390 mg/kg

No other information available.

Section 12: Ecological Information

12.1 Toxicity

Ecotoxicity effects

Ecotoxicity: No information available

Environmental: Terrestrial: Increases the mobility of other elements in the soil. Has a high bioconcentration potential

Physical: No information available

Other: No information available

Section 13: Disposal considerations

13.1 Waste treatment methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

Section 14: Transport Information

Shipping name: Barium Nitrate. Hazard class: 5.1, Oxidizer, Poison. UN number: UN1446.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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Section 15: Regulatory Information

TSCA-listed, EINECS-listed (233-020-5), RCRA D001, D005.

