KM00542 BARIUM NITRATE 100G

SDS No.: BB0055 9067 **SAFETY DATA SHEET** OXIDIZER STORAGE CODE YELLOW

Section 1 **Chemical Product and Company Information**

Nasco
901 Janesville Ave.
P.O. Box 901
Fort Atkinson, WI 53538-0901

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**BARIUM NITRATE**
Synonyms	Barium Dinitrate / Nitric Acid, Barium Salt

Section 2 **Hazards Identification**

Signal word: DANGER
Pictograms: GHS03 / GHS07
Target organs: Central nervous system, Kidneys.

GHS Classification:
Oxidizing solid (Category 2)
Acute toxicity, oral (Category 4)
Acute toxicity, inhalation (Category 4)

GHS Label Information: Hazard statement:
H272: May intensify fire; oxidizer.
H302: Harmful if swallowed.
H332: Harmful if inhaled.

Precautionary statement:
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220: Keep away from clothing/incompatible/combustible materials.
P221: Take any precaution to avoid mixing with combustibles and reducing agents.
P261: Avoid breathing dust.
P264: Wash hands 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.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P330: IF SWALLOWED: Rinse mouth.
P312: Call a POISON CENTER or doctor if you feel unwell.
P370+P378: In case of fire: Use water to extinguish.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 **Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Barium nitrate	10022-31-8	100%	233-020-5

Section 4 **First Aid Measures**

INGESTION: HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 **Fire Fighting Measures**

Suitable Extinguishing Media: Use water. Do not use dry chemicals or foams. CO_2 or Halon® may provide limited control.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Although not flammable, substance is a strong oxidizer which releases oxygen on heating, increasing the burning rate of any material.

Section 6 **Accidental Release Measures**

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

(2012 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2012), GUIDE # 141)

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Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Barium and soluble compounds, as Ba	TWA: 0.5 mg/m^3(A4)	TWA: 0.5 mg/m^3	TWA: 0.5 mg/m^3

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid. White crystalline powder.
Odor: No odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: 592°C (1097°F)
Boiling point: Decomposes
Flash point: Non flammable
Evaporation rate (= 1): Data not available
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): Negligible
Vapor density (Air = 1): Data not available
Relative density (Specific gravity): 3.24 @ 23°C
Solubility(ies): 8.7 g/100 ml in water.
Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: $Ba(NO_3)_2$
Molecular weight: 261.35

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Do not heat or rub with organic matter or other oxidizable substance, e.g. sulfur, sulfides, phosphides, hypophosphites, etc.
Incompatible materials: Barium oxides, magnesium and zinc, reducing agents and combustible materials.
Hazardous decomposition products: Nitrogen oxides, barium oxide, barium dust and/or fume.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 355 mg/kg
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
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.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Inhalation may cause cough, shortness of breath, sore throat.
Ingestion: Ingestion causes excessive salivation, abdominal cramps, abdominal pain, diarrhea, nausea, vomiting, shortness of breath, weakness.
Skin: Contact with skin may cause irritation.
Eyes: Contact with eyes causes irritation.
Signs and symptoms of exposure: Exercise appropriate procedures to minimize potential hazards.
Additional information: RTECS #: CQ9625000

Section 12 Ecological Information

Toxicity to fish: No data available
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (water flea, age <24 neonate), EC50 = 0.512 mM/24 hours
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: UN1446
Shipping name: Barium nitrate
Hazard class: 5.1, (6.1)
Packing group: II
Reportable Quantity: No
Marine pollutant: No
Exceptions: No exceptions
2012 ERG Guide # 141

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Barium nitrate	Listed	Not listed	Not listed	Listed	Not listed	 C ; D1A; D2B

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

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