SAFETY DATA SHEET: BARIUM NITRATE

1. IDENTIFICATION

Product Name: BARIUM NITRATE
Synonyms: Barium (II) nitrate; Barium dinitrate; Nitric acid barium salt
Formula and Formula Weight: Ba(NO₃)₂  261.35
Integra numbers beginning with: B154.10
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)
1216 6th Ave N
Kent WA  98032
Phone: 253-479-7000

2. HAZARDS IDENTIFICATION

OSHA Classification: Hazard Category: Hazard Statement:
Acute Toxicity - Oral 4 Harmful if swallowed.
Acute Toxicity - Inhalation 4 Harmful if inhaled.
Eye Damage/Irritation 2A Causes serious eye irritation.
Oxidizing Solids 2 May intensify fire; oxidizer.

Signal Word: DANGER

Precautionary Statements
Prevention:
Keep away from heat.
Keep and store away from clothing, combustible materials.
Take any precaution to avoid mixing with combustibles.
Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapors, spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves, eye protection, face protection.

Response
Rinse mouth. If swallowed: Call a poison center, doctor if you feel unwell.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
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 advice, attention.
Call a poison center, doctor if you feel unwell.
In case of fire: Use use dry sand, chemical or alcohol-resistant foam to extinguish.

Disposal
Dispose of contents, container in accordance with all governmental regulations.

Hazard Not Otherwise Classified: No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Synonyms</th>
<th>CAS #</th>
<th>% Weight</th>
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<tbody>
<tr>
<td>Barium Nitrate</td>
<td>Barium (II) nitrate; Barium dinitrate; Nitric acid barium salt</td>
<td>10022-31-8</td>
<td>100</td>
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</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: Remove person to fresh air and keep comfortable for breathing.
Eye Contact: Flush eyes with plenty of water. Remove contact lenses, if present and easy to do. If irritation persists, seek medical attention.
Skin Contact: Flush skin with plenty of water. Seek medical attention.
Ingestion: Rinse mouth and give victim large quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.
Additional notes: Symptoms and effects include serious eye irritation; skin, respiratory irritation; vomiting, severe abdominal pain, slow and irregular pulse, muscle twitchings progressing to convulsions and/or paralysis, dilated pupils, confusion, death.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use use dry sand, chemical or alcohol-resistant foam to extinguish.
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline powder
Odor: Odorless
Odor Threshold: Not available
pH: Not available
Melting/Freezing Point: Not available
Initial Boiling Point and Boiling Range: Not available
Flash Point: Not available
Evaporation Rate: Not available
Flammability: Not available
Flammable or Explosive Limits (% by volume in air): Upper: Not available Lower: Not available
Vapor Pressure: Not available
Vapor Density: 9.0
Relative Density: 3.24 g/cc
Solubility: Moderately soluble in water.
Partition Coefficient: n-octanol/water: Not available
Auto-Ignition Temperature: Not available
Decomposition Temperature: 592
Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: No information available
Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur
Conditions to Avoid: Heat and moisture.
Incompatibles: Incompatible with strong bases. Reducing agents, acids, organic or combustible materials.
Decomposition Products: Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Effects of Over Exposure:
Inhalation: Harmful if inhaled. Irritating to the upper respiratory tract and mucous membranes. Dust may be absorbed with systematic toxic effects similar to ingestion.
Skin Contact: Contact may cause skin irritation.

Eye Contact: Contact may cause serious eye irritation.

Ingestion: Harmful or fatal if swallowed. Symptoms of poisoning include vomiting, severe abdominal pain, slow and irregular pulse, muscle twichings progressing to convulsions and/or paralasis, dilated pupils, confusion, possibly death.

Chronic Effects: Central nervous system damage; irritation of the respiratory system; damage to spleen, liver and bone marrow.

Target Organs: None identified

Additional Effects: None identified

Reproductive Effects: None identified

Carcinogenicity: Barium Nitrate is listed by the IARC as Group 2A, Probable Human Carcinogen [as Nitrate or nitrite (ingested) under conditions that result in endogenous nitrosation].

** Toxicity Data: **

<table>
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<tr>
<th>Substance</th>
<th>LD50 (oral, rat)</th>
<th>Exposed</th>
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<tr>
<td>Barium Nitrate</td>
<td>355 mg/kg</td>
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</table>

** 12. ECOLOGICAL INFORMATION**

Aquatic Toxicity Data: No information available

Terrestrial Toxicity Data: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility in soil: No information available

Other adverse effects: No information available

** 13. DISPOSAL CONSIDERATIONS**

Disposal Procedures: Dispose of material and containers in accordance with all local, state and federal regulations.

** 14. TRANSPORTATION INFORMATION**

This product is a regulated material for domestic ground transporation, per CFR Title 49.

UN Number: UN1446

Proper Shipping Name: Barium nitrate

Packing Group: II

Hazard Class: 5.1

Subsidiary Risk: 6.1

Environmental hazards: No information available

Special precautions: No information available

Bulk transport: No information available

** 15. REGULATORY INFORMATION**

Barium Nitrate is listed in the TSCA inventory and in SARA 313 (as barium compounds, nitrate compounds).

** 16. OTHER INFORMATION**

OSHA SDS #: 25197 rev 101 3/27/2015

NE = Not established, NA = Not applicable or Not available

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**** END OF SDS *****