



Hummel Croton Inc.
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MSDS



In case of Emergency Call Chemtrec®
(U.S.) (800)-424-9300
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Barium Nitrate

Section I. Chemical Product and Company Identification

Supplier:

Hummel Croton Inc.
10 Harmich Road
South Plainfield, NJ 07080
(908)-754-1800

Chemical Name: Barium Nitrate

Synonym: Barium (II) Nitrate; Barium Dinitrate; Nitrobarite

CAS Number: 10022-31-8

Chemical Formula: Ba(NO₃)₂

HMIS Rating

Health	3
Flammability	0
Reactivity	3
Personal Protection	E

Section II. Composition and Information on Ingredients

Material	CAS#	%	OSHA	ACGIH
Barium Nitrate	10022-31-8	100%	0.5 mg/m ³ as Ba	0.5 mg/m ³ as Ba

Section III Hazards Identification:

Acute Health Effects: Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound. Ingestion may cause gastroenteritis (inflammation of the lining membrane of the stomach and intestines) with abdominal pain, nausea, vomiting and diarrhea. Systemic effects may follow and may include ringing of the ears, dizziness, elevated blood pressure, blurred vision and tremors.

Chronic Health Effects: Repeated or prolonged ingestion of barium nitrate may cause anemia and possibly methemoglobinemia (cyanosis-decreased ability of red blood cells to transport oxygen) under special circumstances when nitrate-reducing bacteria in the stomach convert the nitrate into the more toxic nitrite. Symptoms may include nausea, vomiting, dizziness, irregular heartbeat and breathing, convulsions, coma and possibly death. Nitrites may cause adverse kidney effects.

Acute Health Effects: This product is not listed by NTP, IARC or regulated as a Carcinogen by OSHA.

Section IV. First Aid Measures

First Aid For Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

First Aid For Skin: In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

First Aid For Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

First Aid For Ingestion: If swallowed, call a physician immediately.

Section V. Fire and Explosion Data

Flammability: Non-Flamable

Flash Points: Not Applicable

Auto-Ignition: Not Applicable

Flammable Limits: Not Applicable

Extinguishing Media: Water

Fire Fighting Procedure: Firefighters should wear full protective clothing and self-contained breathing apparatus. Use water spray from a safe distance to cool fire exposed containers. This material is an oxidizing agent and can result in vigorous reactions with oxidizable materials (reducing agents) increasing the flammability of adjacent combustible materials in a fire situation.

Fire/Explosion Hazards: Material is an oxidizer. Mixtures of nitrates and organic materials can be explosive under fire conditions.

Section VI. Accidental Release Measures

Spill Or Leak Procedures: Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water

Section VII. Handling and Storage

Storage Temperatures: Store at ambient temperature

Shelf Life: Unlimited in tightly closed container.

Special Sensitivity: None

Handling/Storage Precautions: Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Store in a dry place away from direct sunlight, heat and incompatible materials (see Section X). Reseal containers immediately after use. Store away from food and beverages.

Section VIII. Exposure Controls/Personal Protection

Eye Protection: Safety glasses or goggles.

Skin Protection: PVC gloves with impervious boots, apron or coveralls. Employees should wash their hands and face before eating, drinking or using tobacco products.

Respirator: Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved dust respirator must be worn.

Ventilation: Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.

Additional Protective Measures: Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals.

Section IX. Physical and Chemical Properties

Physical Form: Crystals or Powder

Color: White

Odor: Odorless

Molecular Weight: 261.34

Boiling Point: Decomposes at temperature above 590°C (1098°F)

Melting/Freezing Point: Decomposes at temperature above 590°C (1098°F)

Solubility In Water: 9.2g/100ml water @ 20°C

Specific Gravity: 3.24

Section X. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will Not occur

Incompatibilities: Reducing agents, organic compounds and combustible materials.

Instable Conditions: Excessive temperatures (see Incompatibilities).

Decomposition Temperature: Decomposes at temperatures above 590oC(1098oF)

Decomposition products: Oxides of Barium and Nitrogen

Section XI. Toxicological Infomation

RTECS Number: CQ9625000

Routes of Exposure: Eye contact. Ingestion. Inhalation. Skin contact.

Toxicity Data: Skn-rbt 500 mg/24H MLD, eye-rbt 100 mg 24H SEV, orl-rat LD50: 355mg/kg

Chronic Toxic Effects: Repeated or prolonged ingestion of barium nitrate may cause anemia and possibly methemoglobinemia (cyanosis-decreased ability of red blood cells to transport oxygen) under special circumstances when nitrate-reducing bacteria in the stomach convert the nitrate into the more toxic nitrite. Symptoms may include nausea, vomiting, dizziness, irregular heartbeat and breathing, convulsions, coma and possibly death. Nitrites may cause adverse kidney effects.

Acute Toxic Effects: Ingestion may cause gastroenteritis (inflammation of the lining membrane of the stomach and intestines) with abdominal pain, nausea, vomiting and diarrhea. Systemic effects may follow and may include ringing of the ears, dizziness, elevated blood pressure, blurred vision and tremors.

Section XII. Ecological Information

Ecotoxicity: Not available at this time.

Section XIII. Disposal Considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental regulations.

Section XIV. Transportation Information

Proper Shipping Name: Barium Nitrate

UN Number: 1446

Class: 5.1

P.G.: II

Label Code: 5.1(6.1)

Section XV. Regulatory Information

OSHA Status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Chemical Inventory: This compound is on the EPA Toxic Substance Control Act (TSCA) inventory List

California Proposition 65: To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

SARA 313 Title III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: None

Section 313 Toxic Chemicals: This product may be subject to SARA Section 313 reporting (Barium Content 52.55%)

Section XVI. Other Information

Prepared By: Mark Dugan

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