



**INDENTA™**  
**Chemicals (India) Pvt. Ltd.**  
**(ISO 9001:2008 Certified Company)**



201 Adamji Building, 413 Narshi Natha Street, Mumbai - 400 009. (INDIA)  
Office : 91-22-23449820 / 23411655 • Fax : 91-22-23432060 • E-mail : indenta@indenta.com • Website : www.indenta.com

## Material Safety Data Sheet Barium Chloride

### SECTION 1.1 – PRODUCT IDENTIFICATION

**Product name** : **Barium Chloride**  
**Molecular formula** : **BaCl<sub>2</sub>**  
**Molecular weight** : **208.27**  
**CAS no.** : **10361-37-2**

### SECTION: 1.2 – COMPANY IDENTIFICATION

**Company Name: Indenta Chemicals (India) Pvt. Ltd.**

**Address:** 201, Adamji Building, 413, Narshi Natha Street, Mumbai -400 009. (India)

**Telephone #:** +91-22-23449820 / 23411655

**Fax #:** +91-22-23432060

### SECTION 2: HAZARD IDENTIFICATION

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<b>Acute oral toxicity</b>	<b>Category 3</b>
<b>Acute Inhalation Toxicity - Dusts and Mists</b>	<b>Category 4</b>

#### Label Elements

##### Signal Word

Danger

##### Hazard Statements

Toxic if swallowed

Harmful if inhaled

##### Precautionary Statements

##### Prevention

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

#### **Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### **Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

#### **Storage**

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plan

#### **Hazards not otherwise classified (HNOC)**

None identified

### **SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Barium Chloride	10361-37-2	>97

### **SECTION 4: FIRST AID MEASURES**

**Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

**Skin Contact:** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.

**Ingestion:** Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Most important symptoms/effects:** No information available.

**Notes to Physician:** Treat symptomatically

### **SECTION 5: FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

**Unsuitable Extinguishing Media:** No information available.

**Flash Point:** Not applicable

**Method -** No information available

**Autoignition Temperature:** No information available

#### **Explosion Limits**

**Upper** No data available

**Lower** No data available

**Sensitivity to Mechanical Impact:** No information available

**Sensitivity to Static Discharge:** No information available

**Specific Hazards Arising from the Chemical:** Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

**Hazardous Combustion Products:** Hydrogen chloride gas, Chlorine.

**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.

**NFPA:** Health 2 Flammability 0 Instability 1 Physical Hazards N/A

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

**Environmental Precautions:** Avoid release to the environment. See Section 12 for additional ecological information.

**Methods for Containment and Clean Up:** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

## SECTION 7: HANDLING AND STORAGE

**Handling:** Use only under a chemical fume hood. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not ingest.

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place.

## SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Barium Chloride	TWA: 0.5 mg/m <sup>3</sup>	(Vacated) TWA: 0.5 mg/m <sup>3</sup>	IDLH: 50 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWA EV
Barium Chloride	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>

**Engineering Measures:** 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:** Tightly fitting safety goggles

**Skin and body protection:** Long sleeved clothing.

**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.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available.
pH	No information available.
Melting Point / Range	960°C / 1760°F
Boiling Point / Range	1560°C / 2840°F
Flash Point	Not applicable

Evaporation Rate	Negligible
Flammability (Solid, Gas)	No information available
Flammability or Explosive Limits	
Upper	No data available
Lower	No data available
Vapor Pressure	Negligible
Vapor Density	No information available
Relative Density	3.86
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Molecular Formula	BaCl <sub>2</sub>
Molecular Weight	208.27

## SECTION 10: STABILITY AND REACTIVITY

**Reactive Hazard:** None known, based on information available

**Stability:** Stable under normal conditions. Hygroscopic.

**Conditions to Avoid:** Avoid dust formation. Excess heat. Exposure to moisture

**Incompatible Materials:** No information available

**Hazardous Decomposition Products:** Hydrogen chloride gas, Chlorine

**Hazardous Polymerization:** Hazardous polymerization does not occur.

**Hazardous Reactions:** None under normal processing.

## Section 11: TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Barium Chloride	118 mg/kg ( Rat )	Not Listed	Not Listed

**Toxicologically Synergistic Products:** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation:** No information available

**Sensitization:** No information available

**Carcinogenicity:** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Barium Chloride	10361-37-2	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

**Mutagenic Effects:** No information available

**Reproductive Effects:** No information available.

**Developmental Effects:** No information available.

**Teratogenicity:** No information available.

**STOT - single exposure:** None known  
**STOT - repeated exposure:** None known

**Aspiration hazard:** No information available  
**Symptoms / effects, both acute and delayed:** No information available.  
**Endocrine Disruptor Information:** No information available.  
**Other Adverse Effects:** The toxicological properties have not been fully investigated.

## Section 12: ECOLOGICAL INFORMATION

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### Ecotoxicity

Do not empty into drains.

Component	Fresh Water Algae	Freshwater Fish	Microtox	Water Flea
Barium Chloride	Not Listed	Not Listed	Not Listed	14.5 mg/L EC50 = 48 h

**Persistence and Degradability:** No information available.  
**Bioaccumulation/ Accumulation:** No information available.  
**Mobility:** No information available

## Section 13: DISPOSAL CONSIDERATION

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**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

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### DOT

**UN-No:** UN1564  
**Proper Shipping Name:** BARIUM COMPOUNDS, N.O.S.  
**Hazard Class:** 6.1  
**Packing Group:** III

### TDG

**UN-No:** UN1564  
**Proper Shipping Name:** BARIUM COMPOUNDS, N.O.S.  
**Hazard Class:** 6.1  
**Packing Group:** III

### IATA

**UN-No:** UN1564  
**Proper Shipping Name:** BARIUM COMPOUNDS, N.O.S.  
**Hazard Class:** 6.1  
**Packing Group:** III

### IMDG/IMO

**UN-No:** UN1564  
**Proper Shipping Name:** BARIUM COMPOUNDS, N.O.S.  
**Hazard Class:** 6.1  
**Packing Group:** III

**15: OTHER REGULATORY INFORMATION****International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Barium Chloride	X	X	-	233-788-1	-		X	X	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations****TSCA 12(b)** Not applicable**SARA 313:**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Barium chloride	10361-37-2	> 97	1.0

**SARA 311/312 Hazardous Categorization****Acute Health Hazard** Yes**Chronic Health Hazard** No**Fire Hazard** No**Sudden Release of Pressure Hazard** No**Reactive Hazard** No**Clean Water Act** Not applicable**Clean Air Act** Not applicable**OSHA Occupational Safety and Health Administration**

Not applicable

**CERCLA**

Not applicable

**California Proposition 65:** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Barium Chloride	-	X	X	-	X

**U.S. Department of Transportation****Reportable Quantity (RQ):** N**DOT Marine Pollutant:** N**DOT Severe Marine Pollutant:** N**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations****Mexico – Grade:** No information available**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**WHMIS Hazard Class:** D1B Toxic materials**SECTION 16: ADDITIONAL INFORMATION**

This information is provided for documentation purposes only.

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