

# Material Safety Data Sheet

## Barium Chloride Anhydrous

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name :** Barium Chloride Anhydrous  
**CAS-No :** 10361-37-2  
**Recommended Use :** Barium dichloride  
**Uses advised against :** Not for food, drug, pesticide or biocidal product use

#### Company

Choice Chemicals LTD Centre of City, No.235 WUYI Road, Furong District, Changsha, Hunan Province 410011, P.R.China

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**24 hr Emergency number:** 0086 13298652316

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

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

### SECTION 3 - HAZARDS IDENTIFICATION

#### Classification

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

Acute oral toxicity	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 4

#### 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 plant

**Hazards not otherwise classified (HNOC)**

None identified

**SECTION 4. FIRST-AID MEASURES**

<b>General Advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>Eye Contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Most important symptoms and effects** No information available.

**Notes to Physician** Treat symptomatically

**SECTION 5 - FIRE FIGHTING MEASURES**

**Unsuitable Extinguishing Media**  
**Flash Point Method**

No information available  
Not applicable  
No information available

**Antoignition Temperature**  
**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. Thermal decomposition can lead to release of irritating gases and vapors.

**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.

Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Environmental Precautions**

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean up**

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust Up formation.

## SECTION 7 - HANDING AND STORAGE

**Handling**

Use only under a chemical fume hood. Avoid dust formation. Do not ingest. Wear personal protective equipment. Do not breathe vapors/dust. Do not get in eyes, on skin, or on clothing.

**Storage**

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

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL, PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
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>	TWA: 0.5 mg/m <sup>3</sup>

## Legend

**ACGIH** - American Conference of Governmental Industrial Hygienists

**OSHA** - Occupational Safety and Health Administration

**NIOSH IDLH**: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

### 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

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 and body protection

Wear appropriate protective gloves and clothing 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.

#### 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	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	negligible
Vapor Density	Not applicable
Specific Gravity	3.86
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	
Decomposition Temperature	No information available
Viscosity	Not applicable
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.
Conditions to Avoid	Excess heat. Incompatible products.
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

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Barium chloride	LD50 = 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

<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available
<b>Developmental Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	None known
<b>STOT - repeated exposure</b>	None known
<b>Aspiration hazard</b>	No information available
<b>Symptoms/effects, both acute and delayed</b>	No information available
<b>Endocrine Disruptor Information</b>	No information available

Other Adverse Effects                      The toxicological properties have not been fully investigated.

## SECTION 12 - ECOLOGICAL INFORMATION

### Ecotoxicity

Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Barium chloride	Not listed	Not listed	Not listed	EC50: = 14.5 mg/L, 48h(Daphnia magna)
<b>Persistence and Degradability</b>	Soluble in water Persistence is unlikely based on information available.			

**Bioaccumulation/ Accumulation**      No information available.

**Mobility**                                      Will likely be mobile in the environment due to its water solubility.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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.
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## SECTION 14 - TRANSPORT INFORMATION

<b>DOT</b>	
<b>UN-No</b>	UN1564
<b>Proper Shipping Name</b>	Barium compound, n.o.s
<b>Proper technical name</b>	Barium chloride
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>TDG</b>	
<b>UN-No</b>	UN1564
<b>Proper Shipping Name</b>	BARIUM COMPOUND, N.O.S.
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>IATA</b>	
<b>UN-No</b>	UN1564
<b>Proper Shipping Name</b>	BARIUM COMPOUND, N.O.S.
<b>Hazard Class</b>	6.1

Packing Group	III
IMDG/IMO	
UN-No	UN1564
Proper Shipping Name	BARIUM COMPOUND, N.O.S.
Hazard Class	6.1
Packing Group	III

## SECTION 15 - REGULATORY INFORMATION

All of the components in the product are on the following Inventory lists: X = listed  
International Inventories

Component	TSCA	DSL	NSL	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 Hazard Categories** See section 2 for more information

**CWA (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

### U.S. State Right-to-Know Regulations

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

## SECTION 16 - OTHER INFORMATION

Creation Date	28-Apr-2014
Revision Date	18-Jan-2018
Print Date	18-Jan-2018
Revision Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text