

## BARIUM CHLORIDE

### SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** BARIUM CHLORIDE

**Product Code:** 266

**CAS#:** 10361-37-2

**Synonym:** Not Available.

**Chemical Name:** Not Available.

**Chemical Formula:** BaCl<sub>2</sub>

**Formula Weight:** 208.23

**Chemical Formula:** KCl

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

**Composition:**

**Name:** BARIUM CHLORIDE

**Toxicological Data on  
Ingredients:**

Acute Tox. 3; Acute Tox. 4; Eye Irrit. 2; H301,  
H332, H319

### SECTION 3: HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 4), H332

Eye irritation (Category 2), H319

### SECTION 4: FIRST AID MEASURES

**Description of first aid measures**

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled If breathed in.** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact** Flush eyes with water as a precaution.

**If swallowed** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delay** No data available

**Indication of any immediate medical attention and special treatment needed** no data available

### SECTION 5: FIRE FIGHTING MEASURES

**Extinguishing media**

No data available

**Special hazards arising from the substance or mixture**

Hydrogen chloride gas

Barium oxide

Not combustible.

**Advice for firefighters**

No data available



**Further information**

No data available

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**SECTION 7: HANDLING AND STORAGE**

**Precautions:** Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, acids, moisture.

**Conditions for safe storage, including any incompatibilities**

Hygroscopic.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure controls**

**Appropriate engineering controls** Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state and appearance Form</b>	: Powder.
<b>Odour</b>	: Odourless.
<b>Taste</b>	: Not available
<b>Molecular Weight</b>	: Not available
<b>Colour</b>	: White
<b>pH</b>	: 5.0-8.0
<b>Boiling Point</b>	: Not available
<b>Melting Point</b>	: Melting point/range: 963 °C - lit.
<b>Critical Temperature</b>	: Not available
<b>Specific Density</b>	: Not Available
<b>Vapor Pressure</b>	: Not Available
<b>Vapor Density</b>	: 3.856 g/cm <sup>3</sup> at 25 °C - lit.
<b>Volatility</b>	: Not Available



<b>Odor Threshold</b>	: Not Available
<b>Water/Oil Dist. Coeff.</b>	: Not Available
<b>Ionicity (in Water)</b>	: Not Available
<b>Dispersion Properties</b>	: Not Available
<b>Solubility</b>	: 375 g/l at 20 °C

#### SECTION 10: STABILITY AND REACTIVITY DATA

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Possibility of hazardous reactions**

Risk of explosion with:

furan-2-percarbonic acid

Violent reactions possible with:

halogen-halogen compounds

Strong oxidizing agents

strong reducing agents

acids

**Conditions of Instability:** Not available.

**Incompatibility with various substances** Not available.

**Corrosivity:** Not available.

**Special Remarks on Reactivity:** Not available.

**Polymerization:** Will not occur.

#### SECTION 11: TOXICOLOGICAL INFORMATION

**Acute toxicity**

LD50 Oral - Rat - 118 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Inhalation - 1,6 mg/l

Dermal: No data available

**Skin corrosion/irritation**

Skin - reconstructed human epidermis (RhE)

Result: No skin irritation - 15 min

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: irritating

**Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse

Result: negative

**Germ cell mutagenicity**

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test



Metabolic activation: with and without metabolic activation

Result: negative

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

### SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:**

Toxicity to fish static test LC50 - Danio rerio (zebra fish) - > 174 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates static test LC50 - Daphnia magna (Water flea) - 14,5 mg/l - 48 h

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (algae) - > 100 mg/l - 72 h

Toxicity to bacteria static test EC50 - activated sludge - > 943,1 mg/l - 3 h

**Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

**Bioaccumulative potential**

Bioaccumulation Lepomis macrochirus - 0,065 mg/l (barium chloride)  
Bioconcentration factor (BCF): 22,8

**Mobility in soil:** No data available

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### SECTION 14: TRANSPORT INFORMATION

**UN number:**

ADR/RID: 1564                      IMDG: 1564                      IATA: 1564

**UN proper shipping name**

ADR/RID: BARIUM COMPOUND, N.O.S. (barium chloride)

IMDG: BARIUM COMPOUND, N.O.S. (barium chloride)

IATA: BARIUM COMPOUND, N.O.S. (barium chloride)

**Transport hazard class (es):**

ADR/RID: 6.1                                      IMDG: 6.1                                      IATA: 6.1

**Packaging group:**

ADR/RID: III                                      IMDG: III                                      IATA: III

**Environmental hazards:**

ADR/RID: No                                      IMDG Marine pollutant: No                                      IATA: No

### SECTION 15: OTHER REGULATORY INFORMATION



**Safety, health and environmental regulations/legislation specific for the substance or mixture**

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out.

**SECTION 16: OTHER INFORMATION**

**References: Full text of H AND R-Statements.**

H301 Toxic if swallowed.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

**Other Special Considerations:** Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

