Safety Data Sheet

Date of Issue: 30.08.2021 Date of Expiry: 30.08.2026

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : **ECP Limited**
Address : PO Box 34125, Birkenhead, Auckland 0746
Telephone : +64 9 480 4386
Facsimile : +64 9 480 4385
Emergency phone number : 0800 243 622 (24 hours)

Product Name	**Barium Chloride anhydrous**
Product Code	**14311**
CAS No.	**10361-37-2**

Recommended use : Laboratory Investigations

2: Hazard's identification

2.1 GHS Classification

Acute toxicity, Oral (Category C), H301
Acute toxicity, Inhalation (Category D), H332
Aquatic toxicity (Acute or Chronic) (Category D), H402

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word : Danger

Hazard statement(s)

H301 Toxic if swallowed.
H332 Harmful if inhaled.
H402 Harmful to aquatic life.

Precautionary statement(s)

Prevention

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER/ doctor if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).
P330 Rinse mouth.

Storage
P405 Store locked up.

Disposal
P501 Dispose of contents/ container to an approved waste disposal plant.

3: Composition/information on ingredients

3.1 Substances
Molecular weight : 208.23 g/mol
CAS-No. : 10361-37-2
EC-No. : 233-788-1
Index-No. : 056-004-00-8

Component	Classification	Concentration
Barium Chloride		
	6.1 C; 6.1 D; 6.4 A; H301, H332, H319	<= 100 %

4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation :
Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact :
Wash with plenty of soap and water. Get immediate medical advice/attention.

First-aid measures after eye contact :
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion :
Rinse mouth. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after ingestion :
Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Hydrogen chloride gas, Barium oxide

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up :

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling :

Avoid contact with skin and eyes. Do not breathe vapours. Avoid dust formation.

Hygiene measures :

Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits Table

Component	CAS No.	Value	Control parameters	Basis
Barium Chloride	10361-37-2	WES-TWA	0.5 mg/m3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Hand protection : Protective gloves
Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White powder or crystals
Odour	: odourless.
Odor threshold	: No data available.
pH	: No data available.
Melting point/freezing point	: 962 °C
Initial boiling point and boiling range	: 1,560 °C
Flash Point	: No data available.
Evaporation rate	: No data available.
Flammability (solid, gas)	: Non-combustible Solid

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%)	: No data available.
Flammability limit - lower (%)	: No data available.
Explosive limit - upper (%)	: No data available.
Explosive limit - lower (%)	: No data available.
Vapor pressure	: Estimated < 0.01 kPa (25 °C)
Vapor density	: No data available.
Relative density	: 3.86 (20 °C)

Solubility(ies)

Solubility in water	: 310 g/l (0 °C)
Solubility (other)	: No data available.
Partition coefficient (n-octanol/water)	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Viscosity	: No data available.

Other information

Molecular weight : 208.23 g/mol ($BaCl_2$)

10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Barium oxide

Other decomposition products - No data available

In the event of fire: see section 5

11: Toxicological information

11.1. Information on likely routes of exposure

Ingestion : Toxic if swallowed.
Inhalation : Harmful if inhaled.
Skin contact : May cause irritation.
Eye contact : May cause irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)
Oral
Product : LD 50 (Rat): 118 mg/kg
LD L0 (Guinea pig): 76 mg/kg

Dermal
Product: No data available.

Inhalation
Product: No data available.

Repeated dose toxicity
Product: No data available.

Skin corrosion/irritation
Product: May cause skin irritation.

Serious eye damage/eye irritation
Product: May irritate eyes.

Respiratory or skin sensitization
Product: Not a skin sensitizer.

Carcinogenicity
Product: This product is or contains a component that is not classifiable as to its carcinogenicity
based on its IARC, ACGIH, NTP, or EPA classification.
IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Germ cell mutagenicity
In vitro
Product: No mutagenic components identified

In vivo
Product: No mutagenic components identified

Reproductive toxicity
Product: No components toxic to reproduction

Specific target organ toxicity - single exposure
Product: No data available.

Specific target organ toxicity - repeated exposure
Product: No data available.

Aspiration hazard
Product: Not classified

Other effects: None known.

12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6. Other adverse effects
No data available

13: Disposal considerations

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	**UN Number**	1564	1564	1564
14.2	**UN Proper Shipping name**	BARIUM COMPOUND, N.O.S. (Barium chloride)	BARIUM COMPOUND, N.O.S. (Barium chloride)	Barium compound, n.o.s. (Barium chloride)
14.3	**Transport Hazard Class**	6.1	6.1	6.1
14.4	**Packaging group**	III	III	III
14.5	**Environmental Hazards**	No	No	No
14.6	**Special precautions for user**	none		
14.7	**Incompatible materials**	Strong oxidizing agents		
14.8	**Hazchem Code**	2Z		

15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulatory information
HSNO Approval Code: HSR004354
HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006
Tracking Required: not required
Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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