

## SDS no. SGA6T6BR • Version 1.0 • Date of issue: 2023-02-20

### GHS Product identifier

Product name	Barium Chloride (Solution)
--------------	----------------------------

## Laboratory and Analytical Reagent

### Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia

Telephone 08 8440 2000  
email [www.chemsupply.com](http://www.chemsupply.com)

**Emergency phone number**

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

## SECTION 2: Hazard identification

### General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

### Classification of the substance or mixture

**GHS classification in accordance with: UN GHS revision 7**

- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, oral, Cat. 4

### GHS label elements, including precautionary statements

## Pictograms



**Signal word**

**Warning**

**Hazard statement(s)**

H302  
H332

Harmful if swallowed  
Harmful if inhaled

**Precautionary statement(s)**

P261  
P264  
P270  
P271  
P301+P312  
P304+P312  
P304+P340  
P312  
P330  
P501

Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
IF SWALLOWED: Call a POISON CENTER/doctor/phycsian if you feel unwell,  
IF INHALED: Call a POISON CENTER/doctor/phycsian if you feel unwell.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER/doctor/phycsian if you feel unwell.  
Rinse mouth.  
Dispose of contents/container to an approved waste disposal facility

---

**SECTION 3: Composition/information on ingredients**

**Mixtures**

**Hazardous components**

Component	Concentration
Barium chloride (CAS no.: 10361-37-2; EC no.: 233-788-1; Index no.: 056-004-00-8)	<= 30 % (weight)
CLASSIFICATIONS: Acute toxicity, oral, Cat. 3; Acute toxicity, inhalation, Cat. 4. HAZARDS: H301 - Toxic if swallowed; H332 - Harmful if inhaled.	
Water/Aqua/Eau (CAS no.: 7732-18-5)	<= 70 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

---

**SECTION 4: First-aid measures**

**Description of necessary first-aid measures**

**General advice**

First Aid Facilities: Maintain eyewash fountain in work area.

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor (at once).

**If inhaled**

If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**In case of skin contact**

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

**In case of eye contact**

If in eyes, hold eyelids apart and flush eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor, or for at least 15 minutes.

**If swallowed**

If swallowed, do NOT induce vomiting.

**Most important symptoms/effects, acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of immediate medical attention and special treatment needed, if necessary**

# Safety Data Sheet

## Barium Chloride (Solution)

SDS no. SGA6T6BR • Version 1.0 • Date of issue: 2023-02-20

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

---

### SECTION 5: Fire-fighting measures

#### Suitable extinguishing media

Specific Methods: Small fire: Use dry chemical, CO2, water spray or foam.

Large fire: Use water spray, fog or foam.

If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

#### Specific hazards arising from the chemical

Solution will not burn or support combustion Decomposition products include barium oxide.

#### Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

---

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. For personal protection see section 8.

#### Methods and materials for containment and cleaning up

Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal. Wash area down with excess water.

---

### SECTION 7: Handling and storage

#### Precautions for safe handling

Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

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

Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

---

### SECTION 8: Exposure controls/personal protection

#### Control parameters

**CAS: 10361-37-2 (EC: 233-788-1)**

Barium chloride

#### Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

#### Individual protection measures, such as personal protective equipment (PPE)

##### Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

# Safety Data Sheet

## Barium Chloride (Solution)

SDS no. SGA6T6BR • Version 1.0 • Date of issue: 2023-02-20

### Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Normally not required but if in doubt ensure hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

### Body protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

### Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

---

## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, colourless liquid
Color	Colourless
Odor	Nil
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	~ 100C
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	7
Kinematic viscosity	No data available.
Solubility	No data available.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	No data available.
Relative vapor density	No data available.

### Particle characteristics

No data available.

### Supplemental information regarding physical hazard classes

No data available.

### Further safety characteristics (supplemental)

No data available.

---

## SECTION 10: Stability and reactivity

**Reactivity**

Stable under normal conditions of storage and handling.

Reacts with incompatible materials

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal use conditions.

Hazardous Polymerization: Will not occur.

**Conditions to avoid**

Avoid storing in direct sunlight and avoid extremes of temperature.

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Other decomposition products - No data available In the event of fire: see section 5

---

**SECTION 11: Toxicological information**

**Information on toxicological effects**

**Acute toxicity**

// ----- From the Suggestion report (22/02/2023, 11:21 AM) ----- //

The ATE (gas inhalation) of the mixture is: 15000 ppmV

// ----- From the Suggestion report (22/02/2023, 11:21 AM) ----- //

The ATE (vapor inhalation) of the mixture is: 36.67 mg/l

// ----- From the Suggestion report (22/02/2023, 11:21 AM) ----- //

The ATE (oral) of the mixture is: 333.33 mg/kg bw

**Skin corrosion/irritation**

May cause skin irritation.

**Serious eye damage/irritation**

May be irritating to eyes. The symptoms may include redness, itching and tearing.

**Respiratory or skin sensitization**

Not expected to be a respiratory or skin sensitiser.

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

## Safety Data Sheet

### Barium Chloride (Solution)

SDS no. SGA6T6BR • Version 1.0 • Date of issue: 2023-02-20

#### Specific target organ toxicity (STOT) - single exposure

No data available

#### Specific target organ toxicity (STOT) - repeated exposure

No data available

#### Aspiration hazard

No data available

#### Additional information

-----

Barium chloride: \*TOXICITY:

typ. dose mode specie amount unit other

LDLo orl hmn 11.4 mg/kg

LD50 orl rat 118 mg/kg

LD50 scu rat 178 mg/kg

LDLo ivn rat 20 mg/kg

LDLo orl mus 70 mg/kg

LD50 ipr mus 54 mg/kg

LDLo scu mus 10 mg/kg

LD50 ivn mus 12 mg/kg

LDLo orl dog 90 mg/kg

LDLo scu dog 10 mg/kg

LDLo scu cat 38 mg/kg

LDLo orl rbt 170 mg/kg

\*AQTX/TLM96: Not available

\*SAX TOXICITY EVALUATION: THR = HIGH. The soluble barium compounds are poisonous

\*CARCINOGENICITY: Not available

\*MUTAGENICITY: Not available

\*TERATOGENICITY:

Reproductive Effects Data:

TDLo: itt-rat 16659 ug/kg (1D male)

\*STANDARDS, REGULATIONS & RECOMMENDATIONS:

OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z

Transitional Limit: PEL-TWA 0.5 mg(Ba)/m3 [610]

Final Limit: PEL-TWA 0.5 mg(Ba)/m3 [610]

ACGIH: TLV-TWA 0.5 mg(Ba)/m3 [610]

NIOSH Criteria Document: None

NFPA Hazard Rating: Health (H): None

Flammability (F): None

Reactivity (R): None

\*OTHER TOXICITY DATA:

Review: Toxicology Review

Status: Reported in EPA TSCA Inventory, 1980

Meets criteria for OSHA Medical Records Rule

---

## SECTION 12: Ecological information

# Safety Data Sheet

## Barium Chloride (Solution)

SDS no. SGA6T6BR • Version 1.0 • Date of issue: 2023-02-20

### Toxicity

No data available.

### Persistence and degradability

No data available.

### Bioaccumulative potential

No data available.

### Mobility in soil

No data available.

### Results of PBT and vPvB assessment

No data available.

### Endocrine disrupting properties

No data available.

### Other adverse effects

No data available.

---

## SECTION 13: Disposal considerations

### Disposal methods

#### Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

#### Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

---

## SECTION 14: Transport information

### ADG (Road and Rail)

UN Number: 3287

Class: 6.1

Packing Group: II

Proper Shipping Name: TOXIC LIQUID INORGANIC NOS (CONTAINS BARIUM CHLORIDE)

### Hazchem emergency action code (EAC)

2X

### IMDG

UN Number: 3287

Class: 6.1

Packing Group: II

Proper Shipping Name: TOXIC LIQUID INORGANIC NOS (CONTAINS BARIUM CHLORIDE)

### IATA

UN Number: 3287

Class: 6.1

Packing Group: II

Proper Shipping Name: TOXIC LIQUID INORGANIC NOS (CONTAINS BARIUM CHLORIDE)

---

## **SECTION 15: Regulatory information**

---

## **SECTION 16: Other information**

---

### **Further information/disclaimer**

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.