

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 3.0 Revision Date 28.12.2008

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : Barium chloride

Product Number : 202738
Brand : Aldrich

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

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2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Harmful by inhalation. Toxic if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : $BaCl_2$
Molecular Weight : 208,23 g/mol

| CAS-No. | EC-No. | Index-No. | Classification | Concentration |
|------------------------|-----------|--------------|----------------|---------------|
| Barium chloride | | | | |
| 10361-37-2 | 233-788-1 | 056-004-00-8 | T, R20 - R25 | - |

4. 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Handling**

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

hygroscopic

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Personal protective equipment****Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Eye protection

Safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

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

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form Powder with lumps

Safety data

pH no data available

Melting point 963 °C

Boiling point no data available

| | |
|-----------------------|---------------------|
| Flash point | not applicable |
| Ignition temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Density | 3,856 g/mL at 25 °C |
| Water solubility | no data available |

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

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

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 118 mg/kg

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

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 component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity - rat - Intratesticular

Paternal Effects: Testes, epididymis, sperm duct.

Signs and Symptoms of Exposure

Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

| | |
|----------------------|--|
| Inhalation | Harmful if inhaled. May cause respiratory tract irritation. |
| Skin | May be harmful if absorbed through skin. May cause skin irritation. |
| Eyes | May cause eye irritation. |
| Ingestion | Toxic if swallowed. |
| Target Organs | Heart, Nerves., Kidney, Gastrointestinal tract, Bone marrow, Spleen., Liver, |

Additional Information

RTECS: CQ8750000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

| | |
|--|---|
| Toxicity to fish | mortality NOEC - Oncorhynchus kisutch - 88,8 mg/l - 3 d LC50 - Austropotamobius pallipes pall - 46 mg/l - 96 h mortality LOEC - Oncorhynchus kisutch - 158,0 mg/l - 3 d |
| Toxicity to daphnia and other aquatic invertebrates. | EC50 - Daphnia magna (Water flea) - 14,5 mg/l - 48 h |

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. 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

ADR/RID

UN-Number: 1564 Class: 6.1 Packing group: III
Proper shipping name: BARIUM COMPOUND, N.O.S. (Barium chloride)

IMDG

UN-Number: 1564 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: BARIUM COMPOUND, N.O.S.
Marine pollutant: No

IATA

UN-Number: 1564 Class: 6.1 Packing group: III
Proper shipping name: Barium compound n.o.s.

15. REGULATORY INFORMATION

Labelling according to EC Directives

EC Label

Hazard symbols

T Toxic

R-phrase(s)

R20 Harmful by inhalation.
R25 Toxic if swallowed.

S-phrase(s)

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. OTHER INFORMATION

Further information

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