

## GHS Safety Data Sheet

SDS No. : BAI02XAEG

Date Issued : 2004/01/16

Last updated : 2023/01/31

### Section 1. Identification of the substance or mixture and of the supplier

#### Product Information

Product name: **BaSi<sub>2</sub> Barium silicide**

| Product number: | Purity  | Form  | Size or Shape |
|-----------------|---------|-------|---------------|
| BAI04XB         | 99%(2N) | lumps | —             |

#### Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.

1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284

Phone: +81-49-284-1511 Fax: +81-49-284-1351

Emergency Phone : +81-49-284-1511

**Recommended uses and restrictions on use:** For research purposes

### Section 2. Hazards identification

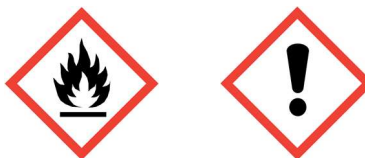
#### GHS Classification

This GHS classification utilized “CLP classification” results as reference.

CLP classification: The classification and categorization adopted in CLP(Regulation on Classification, Labelling and Packaging of Substances and Mixtures, Regulation(EC)1272/2008)

| Health Hazards  | Environmental Hazards | Physical Hazards  |
|---|-----------------------|---|
| Acute toxicity (Oral):Category 4<br>Acute toxicity (Inhalation-dust, mist):<br>Category 4 | No data available     | Substances and mixtures which,<br>in contact with water, emit<br>flammable gases : Category 2 |

GHS Label: F, W



Pictograms or symbols:

Warning word: **DANGER**

| Hazard information  | Description of precaution   |
|---|---|
| <b>In contact with water releases flammable gas</b><br><b>Harmful if swallowed</b><br><b>Harmful if inhaled</b> | Keep away from any possible contact with water, because of violent reaction and possible flash fire.<br>Protect from moisture. Handle under inert gas.<br>Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling.<br>Use only outdoors or in well-ventilated area.<br>IN CASE OF FIRE: Wear protective gloves/eye protection/face protection.<br>Use dry sand, perlite, lime, metal fire extinguishers for extinction.<br>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.<br>Rinse mouth.<br>IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention.<br>Call a POISON CENTER or doctor/physician if you feel unwell.<br>Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed.<br>Dispose of contents/ container in accordance with local/national regulations. |



High Purity Materials

**KOJUNDO CHEMICAL LABORATORY CO.,LTD.**

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### Section 3. Composition / information on ingredients

|                               |                   |
|-------------------------------|-------------------|
| Chemical or common name:      | Barium silicide   |
| Chemical formula:             | BaSi <sub>2</sub> |
| Single Substance or Compound: | Single substance  |
| Composition:                  | 100%              |
| CAS #:                        | 1304-40-1         |
| RTECS#:                       | Not listed        |
| TSCA inventory :              | Listed            |
| EINECS:                       | 2151310           |

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### Section 4. First aid measures

|               |  |
|---------------|--|
| Eye contact:  | Promptly wash eyes with plenty of water while lifting the eye lids.<br>Continue to rinse for at least 15 minutes and get medical attention.  |
| Skin contact: | Wipe off the product immediately by tissue or soft cloth, etc. Promptly flush contaminated skin with soap or mild detergent and water.<br>Contact physician if irritation continues. |
| Inhalation:   | Remove the exposed person immediately and provide fresh air.<br>Get medical attention.   |
| Ingestion:    | Rinse mouth and throat with water. Get medical attention immediately.  |

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### Section 5. Fire fighting measures

|                      |  |
|----------------------|--|
| Extinguishing media: | Dry sand, perlite, lime, metal fire extinguishers.<br>DO NOT use water or foam.  |
| Fire fighting:       | Reacts violently with water, liberating toxic, flammable gas.<br>Remove containers to safe place if possible.<br>Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire |

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### Section 6. Accidental release measures

|   |  |
|---|--|
| Personal Precautions:                   | Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.  |
| Environmental hazard precautions:       | Shut off leak if without risk.<br>Prevent flow out to river, etc. so as not to badly affect.   |
| Method for containment and cleaning up: | Remove all sources of ignition.<br>Avoid unnecessary contacts with spills.<br>Indoor leakage: Ventilate as much as possible until the cleaning is completed.<br>Outdoor leakage: Work from the windward and evacuate the leeward crowd.<br>DO NOT use water with spills. Absorb or cover with vermiculite or other suitable absorbent, and dispose of DOT-approved waste containers as much as possible.<br>Carefully wash spill site with plenty of water after material pick up. |

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### Section 7. Handling and storage

#### Precautions to be taken in handling:

|                |  |
|----------------|--|
| Safe handling: | Air and moisture sensitive. Handle the material in a dry inert gas atmosphere, utilizing glove bag or glove box. |
|----------------|--|



Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.

Keep container or bottle tightly closed when not in use.

Avoid prolonged or repeated exposure.

#### Precautions to be taken in storage:

General precautions: Store the material in a sealed container under dry inert atmosphere.  
Store in a cool, dry, well ventilated and dark place away from incompatible materials.

### Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH (2019) : Barium soluble compounds (as Ba) TLV-TWA 0.5 mg/m<sup>3</sup>  
OSHA (2006) : Barium soluble compounds (as Ba) PEL-TWA 0.5 mg/m<sup>3</sup>

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, air-supplied respirator, safety goggles, face shields, protective gloves, protective clothing, apron, including boots.

### Section 9. Physical and chemical properties

Color and Form: Gray solid

Chemical formula: BaSi<sub>2</sub>

Formula weight: 193.5

Melting point: 1180 °C

Boiling point: No data available

Specific gravity: No data available

Solubility in water: Hydrolyzes in water.  
Reacts violently with water to generate flammable gas.

Flammability: No data available

Oxidation: None

### Section10. Stability and reactivity

Stability: Stable in an inert gas under room temperature.

Reactivity: Decomposes in moisture.

Condition to avoid: Moisture, air

Incompatibility: Water, acids, moisture

Hazardous decomposition products.: Hydrogen

### Section11. Toxicological information

Acute toxicity(Oral): GHS : Category 4; Harmful if swallowed

Acute toxicity(Dermal): GHS : Category 4; Harmful if inhaled

Skin corrosive / irritation: GHS : No data available

Serious eye damage / irritation: GHS : No data available

Respiratory sensitization: GHS : No data available

Skin sensitization: GHS : No data available

Germ cell mutagenicity: GHS : No data available

Carcinogenicity: GHS : No data available  
Barium soluble compounds : ACGIH A4 ; Not classifiable as a human carcinogen.

Reproductive toxicity: GHS : No data available



**Specific target organ toxicity**

– single exposure: GHS : No data available

– repeated exposure: GHS : No data available

Aspiration hazard: GHS : No data available

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**Section12. Ecological information**

Ecotoxicity:

Hazardous to the aquatic environment

– short-term (acute) hazard : GHS : No data available

– long-term (chronic) hazard : GHS : No data available

Hazardous to the ozone layer GHS : No data available

No Freon or Halon

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

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**Section13. Disposal considerations**

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

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**Section 14. Transport information**

UN number: 2813

IATA shipping name: Water-reactive solid, n.o.s.

IATA classification: Class 4.3 (Substances which in contact with water emit flammable gases)

IATA packing group: II

HS code: 2850.00

Marine pollution: None

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**Section 15. Regulatory information**

TSCA inventory: Listed.

Please refer to any other local / national measures that may be relevant.

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**Section 16. Other information**

This SDS is for provision of information, and it does not represent a guarantee the properties or safeties of the product.

The information herein is based on the references we could obtained and the present state of our knowledge, however, this SDS does not always cover all information about the product. Some new information or amendments may be added afterwards.

Prior to use, please investigate the laws and regulations of the organization, area and country where the product is to be used. The information is intended to ordinary usage, in case of special handling, sufficient care should be taken.

