

GHS Safety Data Sheet

SDS No. : BAI04PAEG

Date Issued : 2010/11/18

Last updated : 2022/11/07

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

Product Information

Product name: **Ba₂N Barium nitride**

Product number:	Purity	Form	Size or Shape
BAI10PB	99%(2N)	powder	—

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

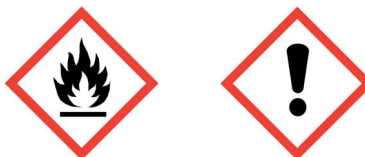
GHS Classification

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 Acute toxicity (Inhalation-dust, mist): Category 4	No data available	Flammable solids : Category 1 Substances and mixtures which, in contact with water, emit flammable gases : Category 2

GHS Label: F, W



Pictograms or symbols:

Warning word: **DANGER**

Hazard information	Description of precaution
Flammable solids. In contact with water releases flammable gas Harmful if swallowed Harmful if inhaled	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting/...equipment. Take precautionary measures static discharge. Keep away from any possible contact with water, because of violent reaction and possible flash fire. Protect from moisture. Handle under inert gas. Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Use only outdoors or in well-ventilated area. IN CASE OF FIRE: Wear protective gloves/eye protection/face protection. Use dry sand, dry sodium chloride based extinguishers or other Class D fire-extinguishing materials for extinction. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. 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.



High Purity Materials

KOJUNDO CHEMICAL LABORATORY CO.,LTD.

<p>Call a POISON CENTER or doctor/physician if you feel unwell. Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed. Dispose of contents/ container in accordance with local/national regulations.</p>

Section 3. Composition / information on ingredients

Chemical or common name:	Barium nitride
Chemical formula:	Ba ₂ N
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	51882-09-8 / 2488939-50-8
RTECS#:	No data available
TSCA inventory :	No data available
EINECS:	No data available

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. 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. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

Section5. Fire fighting measures

Extinguishing media:	Dry chemical powder, soda ash, lime, dry sand DO NOT use water or form.
Fire fighting:	Reacts violently with water, liberating toxic, flammable gas. Remove containers to safe place if possible. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire

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.
Prevent flow out to river, etc. so as not to badly affect.

Method for containment and cleaning up:

Remove all sources of ignition.
Avoid unnecessary contacts with spills.
Indoor leakage: Ventilate as much as possible until the cleaning is completed.
Outdoor leakage: Work from the windward and evacuate the leeward crowd.
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.
Carefully wash spill site with plenty of water after material pick up.



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.
 Keep away from heat, sparks and naked flame.
 Electrically ground all equipment when handling this material and use only non-sparking tools.
 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/m³
 OSHA (2006) : Barium soluble compounds (as Ba) PEL-TWA 0.5 mg/m³

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: Black solid
 Chemical formula: Ba₂N
 Formula weight: 288.6
 Melting point: No data available
 Boiling point: No data available
 Specific gravity: No data available
 Solubility in water: Hydrolyzes in water.
 Reacts violently with water to generate ammonia and barium hydroxide.

Flammability: Combustible substance
 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, oxidizing agents
 Hazardous decomposition products.: Ammonia, barium hydroxide, Nitrogen oxides.

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

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

Section13. Disposal considerations

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

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

Section 15. Regulatory information

TSCA inventory: No data available
Please refer to any other local / national measures that may be relevant.

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.

