

GHS Safety Data Sheet

SDS No. : NBE03PAEG

Date Issued : 2010/10/25

Last updated : 2020/05/19

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

Product Information

Product name: Nb Niobium

Product number:	Purity	Form	Size or Shape
NBE03PB	99.9%(3N)	powder	45 μm pass

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

Health Hazards	Environmental Hazards	Physical Hazards
No data available	No data available	Flammable solids : Category 1

GHS Label: F



Pictograms or symbols:

Warning word: **DANGER**

Hazard information	Description of precaution
Flammable solid	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting/.../equipment. Take precautionary measures static discharge. IN CASE OF FIRE: Wear protective gloves/eye protection/face protection. Use 《refer to our SDS》 to extinguish. Dispose of contents/ container in accordance with local/national regulations.

Section 3. Composition / information on ingredients

Chemical or common name:	Niobium
Chemical formula:	Nb
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	7440-03-1
RTECS#:	QT9900000
TSCA inventory :	listed
EINECS:	2311135

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.



High Purity Materials

KOJUNDO CHEMICAL LABORATORY CO.,LTD.

- Skin contact: 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.

Section 5. Fire fighting measures

Extinguishing media:

- Dry sand, Perlite, Metal fire extinguishers.
- DO NOT use water fog or foam, carbon dioxide.

Fire fighting: Flammable material.

- 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:

- Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.
- Wear disposable coveralls and discard them after use.
- 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.
- 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: Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.
- Avoid prolonged or repeated exposure.
 - Air and moisture sensitive. Light sensitive.
 - Keep away from heat, sparks and naked flame.
 - Electrically ground all equipment when handling this material and use only non-sparking tools.

Precautions to be taken in storage:

- General precautions: Store the material in a sealed container, or in the original container under dry inert atmosphere.
- Store in a cool, dry, well ventilated and dark place away from incompatible materials.
 - Keep away from any heat, sparks, and flames.



Section 8. Exposure controls / personal protection

Exposure guideline:	ACGIH(2019) : No data available OSHA(2006) : No data available
Facility measures:	Local ventilation of closed work room or total proper ventilation to prevent inhalation.
Protective ware:	Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, protective gloves.

Section 9. Physical and chemical properties

Color and Form:	Gray solid
Chemical formula:	Nb
Formula weight:	92.9
Melting point:	2468 °C
Boiling point:	4742 °C
Density:	8.57 g/cm ³
Solubility:	Insoluble; water, hydrochloric acid, sulfuric acid, nitric acid, alkaline solution Soluble; hydrofluoric acid
Flammability:	Combustible substance
Oxidation:	None

Section10. Stability and reactivity

Stability:	Stable in closed container.
Reactivity	
Incompatibility:	Strong bases, strong oxidizing agents, halogens, oxygen

Section11. Toxicological information

Acute toxicity:	GHS : No data available
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
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	
— acute toxicity:	GHS : No data available
— chronic toxicity:	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



Section 13. 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: 3089
IATA shipping name: Metal powder, flammable, n.o.s.
IATA hazard class: Class 4.1 (Flammable solids)
IATA packing group: II
HS code: 8112.92
Marine pollution: None

Section 15. Regulatory information

TSCA inventory: listed.

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.

