SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Niobium Disulfide

Product Code: NB-S2-05

CAS Number: 12136-97-9

Relevant identified uses of the substance: Scientific research and development

Supplier details:
American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551 Fax: +1 310-208-0351 Emergency telephone number: Domestic, North America +1 800-424-9300 International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
No known OSHA hazards
HMIS Classification
Health Hazard: 1
Flammability: 0
Physical hazards: 0
NFPA Rating
Health Hazard: 1
Fire: 0
Reactivity Hazard: 0
Potential Health Effects
Inhalation May be 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 May be harmful if swallowed.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : NbS2
Molecular Weight : 124.97 g/mol
SECTION 4. FIRST AID MEASURES

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration
In case of skin contact
Wash off with soap and plenty of water.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties
Flash point no data available
Ignition temperature no data available
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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid dust formation.
Environmental precautions
No special environmental precautions required.
Methods for cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for
preventive fire protection.
Storage
Keep container tightly closed in a dry and well-ventilated place.
Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Personal protective equipment
Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use
type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under
appropriate
government standards such as NIOSH (US) or CEN (EU).

Hand protection
For prolonged or repeated contact use protective gloves.

Eye protection
Safety glasses

Hygiene measures
General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: Crystalline/Powder
Color: Grey

Safety data
pH no data available
Melting point: no data available
Boiling point: no data available
Flash point: no data available
Ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Density: no data available
Water solubility: no data available

SECTION 10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Materials to avoid
Hydrogen peroxide, Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Sulphur oxides, Molybdenum oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
LC50 Inhalation - rat - 4 h - > 2,820 mg/m3
Remarks: Lungs, Thorax, or Respiration:Other changes.
Irritation and corrosion: no data available
Sensitisation: no data available

Chronic expoIARC: 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.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects
Inhalation May be 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 May be harmful if swallowed.

SECTION 12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
no data available
Ecotoxicity effects
no data available
Further information on ecology
no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations.
Contaminated packaging
Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

SECTION 15. REGULATORY INFORMATION

OSHA Hazards
No known OSHA hazards
DSL Status
All components of this product are on the Canadian DSL list.
SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
No SARA Hazards
16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2016 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.