



SAFETY DATA SHEET

Revision date 16-July-2020

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

CAS No.	24621-21-4
Product Name	Niobium nitride
Molecular Formula	NbN

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use	Laboratory chemicals.
Used advised against	Not intended for diagnostic or therapeutic use.

1.3. Details of the supplier

Company name	Hunan Huawei Jingcheng Material Technology Co., Ltd.
Address	Room 516, Hunan International Business Center, Jintai Plaza, East Second Ring, Furong District, Changsha City, Hunan Province, China.
Website	www.hnjc-metal.com
Telephone	0086-731-85124338
Fax	

1.4. Emergency telephone number

Chemtrec
0086-731-85124338

Section 2: HAZARDS IDENTIFICATION

This chemical is not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Label Elements

not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Substances

CAS No.	Description
24621-21-4	Niobium nitride

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Consult a physician if necessary.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
Skin Contact	Wash skin with soap and water.
Eye contact	Wash with plenty of water.
Ingestion	Never give anything by mouth to an unconscious person. Clean mouth with water.
Self-Protection of the First Aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to

Hunan Huawei Jingcheng Material Technology Co., Ltd. www.hnjc-metal.com

protect themselves and prevent spread of contamination.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available. None reasonably foreseeable. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing agents:

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

Special hazards arising from the substance or mixture: niobium oxides

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Protective equipment: No special measures required.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Personal precautions Ensure adequate ventilation, especially in confined areas.
For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.
General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment.
Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment Eye/face protection

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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).

Control of environmental exposure

No special environmental precautions required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

- a) Appearance: solid
- b) Odor: no data available
- c) Odor Threshold: no data available
- d) pH: no data available
- e) Melting point/freezing point: no data available
- f) Initial boiling point and boiling range: no data available
- g) Flash point: no data available
- h) Evaporation rate: no data available
- i) OSHA Flammability Class: no data available
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapor pressure: no data available
- l) Vapor density (air = 1): no data available
- m) Relative density: 8,4 g/cm³
- n) Water solubility: Insoluble in water
- o) Partition coefficient - noctanol/water: no data available
- p) Auto-ignition temperature: no data available
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available

Section 10: STABILITY AND REACTIVITY

Reactivity	Stable under recommended storage conditions
Reacts With	No data available
Conditions to avoid	Keep out of water supplies and sewers. Do not store at elevated temperatures.
Incompatible Conditions	Strong oxidizing agents
Hazardous Decomposition Products	Formed under fire conditions. - niobium oxides

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Skin corrosion/irritation

Serious eye damage/eye irritation Respiratory or skin

sensitisation Germ cell mutagenicity Carcinogenicity

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

Specific target organ toxicity - single exposure Specific target organ toxicity -

repeated exposure Aspiration hazard

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity	No further relevant information available.
Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available.
PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Other adverse effects	No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Contaminated packaging Do not reuse container
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

	<u>RID / ADR</u>	<u>IMDG</u>	<u>ICAO (air) / IATA</u>
	Not regulated	Not regulated	Not regulated
14.1 UN/ID no	-	-	-
14.2 Proper shipping name	-	-	-
14.3 Hazard Class	-	-	-
Subsidiary hazard class / Labels	-	-	-
14.4 Packing Group	-	-	-
14.5 Environmental Hazard	-	-	-
14.6 Special Provisions	-	-	-

Section 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

Section 16: OTHER INFORMATION

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet