

SAFETY DATA SHEET

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA- NO OEL DATA

Section 1: Chemical Product and Company Identification

1.1 Product identifiers

Product name : Metallurgical Grade Niobium Powder
CAS-No. : 7440-03-1
Chemical Name : Nb
Purity : 99.90%

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

Laboratory chemicals, Manufacture of substances

1.3 Contact Information

Company : Platotex Technology Company Ltd.
Level 21, The Centre 99 Queen's Road Central,
Central, Hong Kong
Tell : +852 2371-7679
Fax : +852 2579-0808

Section 2: Composition and Information on Ingredients

2.1 Composition

Name : Metallurgical Grade Niobium Powder
CAS-No. : 7440-03-1
% by Weight : 100

2.2 Toxicological Data on Ingredients

Not applicable

Section 3: Hazards Identification

2.1 Classification of the substance or mixture

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

2.2 Label elements

Danger

2.3 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 4: First Aid Measures

4.1 If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

4.2 In case of skin contact

Wash off with soap and plenty of water.

4.3 In case of eye contact

Flush eyes with water as a precaution.

4.4 If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.5 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in

4.6 Indication of any immediate medical attention and special treatment needed

N/A

Section 5: Fire and Explosion Data

Extinguishing media

5.1 Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

niobium oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information no data available

Use water spray to cool unopened containers.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

Section 7: Handling and Storage

7.1 Precautions

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Pyrophoric and self-heating hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Eye/face protection

Face shield and safety glasses 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.

Body Protection

Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9: Physical and Chemical Properties

- a) Appearance Form: Drey powder
- b) Odour no data available
- c) Odour Threshold no data available
- d) pH no data available
- e) Melting point/freezing point
Melting point/range: 2.468 °C - lit
- f) Initial boiling point and boiling range
4.742 °C - lit
- g) Flash point not applicable
- h) Evaporation rate no data available
- i) Flammability (solid, gas) : no data available
- j) Upper/lower flammability or explosive limits
no data available
- k) Vapour pressure no data available
- l) Vapour density no data available
- m) Relative density 8,57 g/mL at 25 °C
- n) Water solubility: no data available
- o) Partition coefficient: noctanol/water no data available
- p) Autoignition temperature no data available
- q) Decomposition temperature no data available
- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available

Section 10: Stability and Reactivity Data

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

Section 11: Toxicological Information

- 11.1 Routes of Entry: Not available.

Toxicity to Animals: LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Non-corrosive for skin. Non-sensitizer for skin. Non-permeation by skin.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of 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.

12.6 Other adverse effects

No data available

Section 13: Transport Information

13.1 UN number

ADR/RID: 1383 IMDG: 1383 IATA: 1383

13.2 UN proper shipping name

ADR/RID: PYROPHORIC METAL, N.O.S. (Niobium)

IMDG: PYROPHORIC METAL, N.O.S. (Niobium)

IATA: Pyrophoric metal, n.o.s. (Niobium)

13.3 Transport hazard class(es) ADR/RID: 4.2 IMDG: 4.2 IATA: 4.2

13.4 Packaging group ADR/RID:I IMDG: I IATA: I

13.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no

~~**13.6 Special precautions for user no data available**~~

Section 14: Regulatory Information

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

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

No data available

14.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 15: Disposal Consideration

15.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting, as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

15.2 Contaminated packaging

Dispose of as unused product.

Section 16: Other Information

N/A

