

SAFETY DATA SHEET

Version: v1

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Niobium
Product Number : N108765
Brand : aladdin
CAS-No. : 7440-03-1(powder)

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION
Address : 14078 Meridian Parkway,
Riverside, CA. 92518
Telephone : +1 (833) 552-7181
Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300
CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H228

Flammable solid

H250

Catches fire spontaneously if exposed to air

Precautionary statement(s)

P210

Keep away from heat, hot surface, sparks, open flames and other ignition sources. -
No smoking.

P222

Do not allow contact with air.

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P231	Handle under inert gas.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P335+P334	Brush off loose particles from skin. Immerse in cool water [or wrap in wet bandages].
P370+P378	In case of fire: Use ... to extinguish.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: no data available
Formula	: Nb
Molecular weight	: 92.91
CAS No.	: 7440-03-1(powder)
EC-NO.	: 231-113-5

Component	Classification	Concentration
Niobium	no data available	≥99.5% metals basis, ≥200目

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

no data available

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.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media

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

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- niobium oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation.Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

no data available

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end use(s)

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no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

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
gloves 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.
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)
Splash protection
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

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Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)
data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the
supplier of the CE approved gloves.This recommendation is advisory only and must be evaluated by an Industrial
Hygienist familiar with the specific situation of anticipated use by our customers.It should not be construed as
offering an approval for any specific use scenario.

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 data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	no data available
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available

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e) Melting point/freezing point	2468±10°C
f) Initial boiling point and boiling range	4742°C
g) Flash point	no data available
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	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/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 N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

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 bases, Strong oxidizing agents, Halogens

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.- niobium oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

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. 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.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

no data 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

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12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

no data available

SECTION 14: Transport information

DOT (US)

UN number: 1383	Packing group: I	Class: 4.2
Proper shipping name: PYROPHORIC METAL, N.O.S. (Niobium)	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: No
Environmental Hazards: No		

IMDG

UN number: 1383	Packing group: I	EMS-No: No
Proper shipping name: PYROPHORIC METAL, N.O.S. (Niobium)		

IATA

UN number: 1383	Packing group: I	Class: 4.2
Proper shipping name: PYROPHORIC METAL, N.O.S. (Niobium)		

SECTION 15: Regulatory information

no data available

SECTION 16: Other information

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