

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

Niobium carbide: sc-269971



MATERIAL SAFETY DATA SHEET

1 Identification of substance:

Product Name: Niobium carbide Catalog Number: sc-269971

Supplier: Santa Cruz Biotechnology, Inc.

2145 Delaware Avenue

Santa Cruz, California 95060 800.457.3801 or 831.457.3800

Emergency: ChemWatch

> Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2 Hazards identification

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



GHS02 Flame

Flam. Sol. 2 H228 Flammable solid.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



F; Highly flammable

R11: Highly flammable.

Information concerning particular hazards for human and environment: Not applicable

Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02

Signal word Warning

Hazard statements

H228 Flammable solid.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. P210

P241

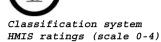
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P240 Ground/bond container and receiving equipment.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

Hazard description: WHMIS classification





(Hazardous Materials Identification System)



Health (acute effects) = 1 Flammability = 2

Reactivity = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

CAS# Description:

12069-94-2 Niobium carbide Identification number(s):

EC number: 235-117-8

4 First aid measures

Description of first aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents Special powder for metal fires. Do not use water.

For safety reasons unsuitable extinguishing agents Water

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Keep away from ignition sources.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Specific end use(s) No further relevant information available.

Storage

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed. Store at room temperature.

Store in cool, dry conditions in well sealed containers.

8 Exposure controls/personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: No data

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Maintain an ergonomically appropriate working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands:

Impervious gloves

Check protective gloves prior to each use for their proper condition.

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties General Information		
Appearance:		
Form:	Powder	
Formula:	NbC	
Weight:	104.91	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	3500°C (6332 °F)	
Boiling point/Boiling range:	Not determined	
Sublimation temperature / start:	Not determined	
Flash point:	Not applicable	
Flammability (solid, gaseous)	Highly flammable.	
Ignition temperature:	Not determined	
Decomposition temperature:	Not determined	
Auto igniting:	Not determined.	
Explosion limits:		
Lower:	Not determined	
Upper:	Not determined	
Vapor pressure:	Not applicable.	
Density:	Not determined	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Insoluble	
Partition coefficient (n-octanol/water):	Not determined.	
Viscosity:		
dynamic:	Not applicable.	
kinematic:	Not applicable.	
Other information	No further relevant information available.	

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions No dangerous reactions known

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Niobium compounds have caused liver damage in animal studies. Niobium metal has caused kidney damage in experimental animals and fibrogenic effects on the lungs of experimental animals.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Do not allow material to be released to the environment without proper governmental permits.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Marine pollutant:

Danger code (Kemler):

Special precautions for user

Recommendation: Disposal must be made according to official regulations.

UN proper shipping name DOT, IMDG, IATA FLAMMABLE SOLID, INORGANIC, N.O.S. (Niobium carbide) 3178 FLAMMABLE SOLID, INORGANIC, N.O.S. (Niobium carbide) Transport hazard class(es) DOT Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives. 4.1 ADR 4.1 (F3) Flammable solids, self-reactive substances and solid desensitised explosives 4.1 (Mark the substances and solid desensitised explosives) 4.1 (F3) Flammable solids, self-reactive substances and solid desensitised explosives 4.1 (Mark the substances and solid desensitised explosives) 4.1 (F3) Flammable solids, self-reactive substances and solid desensitised explosives 4.1 (F3) Flammable solids (Mark the substances and solid desensitised explosives) 4.1 (F3) Flammable solids (Mark the substances and solid desensitised explosives) 4.1 (F3) Flammable solids (Mark the substances and solid desensitised explosives)	UN-Number DOT, ADR, IMDG, IATA	UN3178
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	Label	
DOT, ADR, IMDG, IATA		
	DOT, ADR, IMDG, IATA	III
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Warning: Flammable solids, self-reactive substances and solid desensitised explosives

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
UN "Model Regulation":	UN3178, FLAMMABLE SOLID, INORGANIC, N.O.S. (Niobium carbide), 4.1, III

15 Regulatory information

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

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

Information about limitation of use: For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed.

REACH - Pre-registered substances Substance is listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

9/3/2013