

# 1. Product and Company Identification

Trade Name: Niobium Telluride

Chemical Formula: NbTe<sub>2</sub>

Recommended Use: Scientific research and development

Manufacturer/Supplier: Stanford Advanced Materials

Street: 23661 Birtcher Dr.
City: Lake Forest
State: California
Zip Code: 92630
Country: USA

Tel #: (949) 407-8904

## 2. Hazards Identification

Signal Word: Danger





Hazard Statements: H302+H332: Harmful if swallowed or if inhaled

H360: May damage fertility or the unborn child

H373: May cause damage to organs through prolonged or repeated

exposure

Precautionary Statements: P260: Do not breathe dust/fume/gas/mist/vapours/spray

P281: Use personal protective equipment as required

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest

in a position comfortable for breathing

P405: Store locked up

P501: Dispose of contents/container in accordance with

local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 2 Flammability: 0 Physical: 1

# 3. Composition

Chemical Family: Inorganic

Additional Names: Niobium ditelluride

Niobium Ditelluride (NbTe<sub>2</sub>):

Percentage: 100 wt% CAS #: 12034-83-2 EC #: 234-813-9

	4. First Aid Procedures		
General Treatment:	Seek medical attention if symptoms persist.		
Special Treatment:	None		
Important Symptoms:	None		
Inhalation: Ingestion:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Give one to two glasses of water. Never induce vomiting or give		
Skin:	anything by mouth to an unconscious person.  Wash affected area with mild soap and water. Remove any		
Eyes:	contaminated clothing.		
	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing		
	5. Firefighting Measures		
Flammability:	Non-flammable		
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. Do not use water for metal fires use CO <sub>2</sub> , sand, extinguishing powder.		
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.		
	6. Accidental Release Measures		
If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.		
Environmental Precautions:	Isolate runoff to prevent environmental pollution.		
	7. Handling and Storage		
Handling Conditions: Storage Conditions:	Wash thoroughly after handling. Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.		
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with		
Ventilation:	compressed air.  Provide sufficient ventilation to maintain concentration at or below threshold limit.		
8.	Exposure Controls and Personal Protection		
Permissible Exposure Limits:	N/A		
Threshold Limit Value:	N/A		
Special Equipment:	None		
Respiratory Protection:	Dust Respirator		
Protective Gloves:	Rubber gloves		
Eye Protection:	Safety glasses or goggles		
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.		

9. Physical and Chemical Characteristics						
Color	N/A					
Form:	Powder, Pieces, Sputtering target, Custom parts					
Odor:	Odorless					
Water Solubility:	Insoluble					
Boiling Point:	N/A					
Melting Point:	N/A					
Flash Point:	N/A					
Autoignition Temperature:	N/A					
Density:	7.09 gm/cc					
Molecular weight:	348.1 g/mol					
	10. Reactivity					
Stability:	Stable under recommended storage conditions					
Reacts With:	Oxidizing agents					
Incompatible Conditions:	None					
Hazardous Decomposition Products:	Metal oxide fume					
	11. Toxicological Information					
Potential Health Effects:						
Eyes:	May cause irritation					
Skin:	cause irritation					
Ingestion:	Cause irritation					
Inhalation:	Cause irritation					
Chronic:	N/A					
Signs & Symptoms: Aggravated	N/A					
Medical Conditions:	N/A					
Median Lethal Dose:	N/A					
Carcinogen:	N/A					
	12. Ecological Information					
Aquatic Toxicity:	High					
Persistent Bioaccumulation Toxicity:	N/A					
Very Persistent, Very Bioaccumulative:	N/A					
Notes:	N/A					

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

## 14. Transportation Data

Hazardous: Hazardous for transportation



Hazard Class: Packing 9 Miscellaneous dangerous substances and articles

Group: III UN Number: UN3077

Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Niobium

Telluride)

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Sec 302 Extremely Hazardous: N/A
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: Yes

#### 16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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