



# Super Conductor Materials, Inc.

391 Spook Rock Industrial Park, Suffern, NY 10901 · 845.368.0240 · Fax 845.368.0250 · www.scm-inc.com

Chemtrec: (800) 424-9300

Poison Center: (800) 562-8236

Revision Date: January 8<sup>th</sup>, 2019

## SAFETY DATA SHEET

Identity: Nickel Telluride

Formula: NiTe

### SECTION I - GENERAL INFORMATION

Manufacturer: Super Conductor Materials, Inc.

The information below is believed to be accurate and represents the best information available to Super Conductor Materials, Inc. However, SCM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 186.31

CAS #	OSHA PEL	ACGIH TLV	%
12142-88-0	1 mg/m <sup>3</sup>	1mg/m <sup>3</sup>	0.0-100.0%

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: N/A

Vapor Pressure (vs. air or mmHg): N/A

Melting Point: 860°C (1580°F)

Density: N/A g/cm<sup>3</sup>

Evaporation Rate: N/A

Flash Point: N/A

Solubility in water: Insoluble

*Appearance and odor:* Grey, odorless

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

*Method Used:* Unknown

*Explosive Limits:* LEL: N/A

UEL: N/A

*Extinguishing Media:* Use suitable extinguishing agent for surrounding material and type of fire

#### *Special Fire Fighting Procedures:*

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

*Fire Hazards and Explosive Hazards:* When heated to decomposition or on contact with acid or acid fumes, nickel telluride may emit highly toxic fumes.

### SECTION V - REACTIVITY DATA



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*Stability:* Stable

*Conditions to Avoid (instability):* None

*Incompatibility (materials to avoid):* Strong acids and acid fumes

*Hazardous Decomposition or Byproducts:* None recorded

*Hazardous Polymerization:* Will not occur

*Conditions to Avoid (Hazardous polymerization):* None

## SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes      Skin? Yes      Eyes? Yes      Ingestion? Yes      Other? No

Nickel is a confirmed carcinogen with experimental carcinogenic, neoplastigenic, tumorigenic and teratogenic data. Poison by ingestion, intratracheal, intraperitoneal, subcutaneous and intravenous routes. An experimental teratogen. Ingestion of soluble salts causes nausea, vomiting and diarrhea. Hypersensitivity to nickel is common and can cause allergic contact dermatitis, pulmonary asthma, conjunctivitis and inflammatory reactions around nickel containing medical implants and prosthesis. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Elemental tellurium has relatively low toxicity. It is converted in the body to dimethyl telluride which imparts a garlic-like odor to the breath and sweat. Heavy exposures may, in addition, result in headache, drowsiness, metallic taste, loss of appetite, nausea, tremors, convulsions, and respiratory arrest. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

### Signs and Symptoms of Overexposure:

*Inhalation:* May cause a red, dry mouth, sore nose and throat, coughing, shortness of breath, garlic-like odor to breath, sweat and urine, loss of appetite, sleepiness and nausea.

*Ingestion:* May cause a dry mouth, garlic-like odor to breath and urine, loss of appetite, sleepiness, gastritis, convulsions, asphyxia, giddiness, nausea, diarrhea and vomiting. Nickel toxicity may cause: gastroenteritis; Nervous symptoms such as tremor, chorea-like movements and paralysis occur prior to death, which occurs mostly from heart failure.

*Skin:* May cause red, itching, swelling, burning and ulcers.

*Eye:* May cause red, itching and watering.

### Health Hazards (Acute and Chronic):

#### *Inhalation:*

Acute: DANGER-POISON. May cause irritation to the upper respiratory tract, mucous membranes and nasal cavities, dry mouth, garlic odor to breath, sweat and urine, nausea and vomiting. May cause pulmonary asthma attacks.

Chronic: May cause anorexia, nausea, depression to the central nervous system and somnolence. Prolonged or repeated inhalation may cause pneumonic.

#### *Ingestion:*

Acute: DANGER-POISON. Large doses may cause intestinal disorders, convulsions, asphyxia, dry mouth, suppression of sweat, garlic odor to breath and urine.

Chronic: May cause nickel toxicity, anorexia, nausea, depression to the central nervous system and somnolence.



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*Skin:*

Acute: May cause irritation.

Chronic: May sensitize the skin (nickel itch). May cause allergic dermatitis, eczematous dermatitis and may be accompanied a week later with superficial skin ulcers, which may discharge and become crusted.

*Eye:*

Acute: May cause irritation.

Chronic: May cause conjunctivitis.

*Target Organs:* May affect the nasal cavity, respiratory system, lungs, blood and skin.

*Carcinogenicity:* NTP? No IARC Monographs? No OSHA Regulated? No

*Medical Conditions Aggravated by Exposure:* Pre-existing respiratory disorder, pulmonary functions, and asthma and skin disorders.

*Emergency and First Aid Procedures:*

*Inhalation:* Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

*Ingestion:* Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

*Skin:* Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

*Eye:* Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE
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*Steps to be taken in case material is released or spilled:*

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

*Waste disposal method:*

Dispose of in accordance with state, local, and federal regulations.

*Hazard Label Information:*

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

SECTION VIII - CONTROL MEASURES
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*Protective Equipment Summary (Hazard Label Information):*

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

*Ventilation:*

Local Exhaust: To maintain concentration at low exposure levels.

Special: Handle in a controlled environment

Mechanical (General): Recommended.



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*Work/Hygienic/Maintenance Practices:*

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established
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