MATERIAL SAFETY DATA SHEET

This form may be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. IDENTITY (As Used on Label and List): **Tin telluride, powder and pieces** Product Code: **T-MSDS0157** Reference #: **12040-02-7**

SECTION I - PRODUCT IDENTIFICATION Tin telluride, powder and pieces

CHEMTREC

ProChem, Inc.

Poison/Emrgncy

Local

MANUFACTURER NAME AND ADDRESS:

<u>TELEPHONE</u> <u>NUMBERS</u>:

(800)424-9300

(800) 795-8788

() - 911

DATES:

Date Created: 02/23/1993 Revision: 03/30/2000 Printed: 12/02/2005

ProChem, Inc. 826 Roosevelt Rd. Rockford IL 61109

SYNONYMS

Tin (II) telluride

CHEMICAL FAMILY: Metal telluride

DOT HAZARD LABEL: No data.

FORMULA: SnTe

MOLECULAR WEIGHT: 246.29

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION Tin telluride, powder and pieces

HAZARDOUS COMPONENTS (CHEMICAL NAME)

INAME:	Tin telluride		
<u>CAS #:</u>	12040-02-7	PERCENTAGE:	0.0 -100.0 %
OSHA PEL:	2 mg(Sn)/m3 / .1 mg(Te)/m3	ACGIH TLV:	
OTHER LIMITS:	NE	ACGIN ILV:	2 mg(Sn)/m3 / .1 mg(Te)/m3
SEC.302 (EHS):	No	SEC.304 RO:	No
<u>SEC.313:</u>	No	SECROTINO.	110

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS Tin telluride, powder and pieces

PHYSICAL STATES: BOILING POINT: MELTING POINT: SPECIFIC GRAVITY (WATER = 1): DENSITY: VAPOR PRESSURE (VS. AIR OR MM HG): VAPOR DENSITY (VS. AIR = 1):

[] Gas , [] Liquid , [X] Solid N.A. 780.00 C (1436.0 F) 6.48 No data. No data. No data.

EVAPORATION RATE (VS BUTYL ACETATE=1):No data.SOLUBILITY IN WATER:insolublePERCENT VOLATILE:N.A.PH:No data.APPEARANCE AND ODORNo data.

Grey powder and pieces, no odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA Tin telluride, powder and pieces

FLASH PT: N.A. METHOD USED: NON-FLAMMABLE EXPLOSIVE LIMITS: LEL: NA UEL: NA EXTINGUISHING MEDIA

USE: Not applicable. Use suitable extinguishing media for surrounding materials 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.

UNUSUAL FIRE AND EXPLOSION HAZARDS

When heated to decomposition, tin telluride emits toxic fumes of tellurium.

SECTION V - REACTIVITY DATA Tin telluride, powder and pieces

STABILITY: Unstable [] Stable [X] CONDITIONS TO AVOID - INSTABILITY

None

INCOMPATIBILITY - MATERIALS TO AVOID

None recorded HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Fumes of tellurium.

HAZARDOUS POLYMERIZATION: Will occur [] Will not occur [X] CONDITIONS TO AVOID - HAZARDOUS POLYMERIZATION

None

SECTION VI - HEALTH HAZARD DATA Tin telluride, powder and pieces

<u>ROUTE(S) OF ENTRY:</u> Inhalation? Yes , Skin? Yes , Eyes? Yes , Ingestion? Yes , Other: N <u>HEALTH HAZARDS (ACUTE AND CHRONIC)</u>

To the best of our knowledge the chemical, physical and toxicological properties of tin telluride have not have not been thoroughly investigated and recorded.

Tin compounds have variable toxicity. Elemental tin and inorganic tin compounds have low toxicity and are poorly absorbed when ingested. Some inorganic tin salts are irritating or can liberate toxic fumes on decomposition. The latter is particularly true of tin halogens. (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)

INHALATION:

Acute: May cause irritation to the respiratory system, a dry mouth, garlic odor to breath, sweat and urine. Chronic: May cause anorexia, nausea, depression, somnolence and pulmonary fibrosis.

INGESTION:

Acute: May cause a dry mouth, suppression of sweat, garlic odor to breath and urine. Chronic: May cause anorexia, nausea, depression and somnolence.

SKIN: Acute: May cause irritation and itching. Chronic: May cause dermatitis.

EYE:

Acute: May cause irritation. Chronic: No chronic health effects recorded.

TARGET ORGANS: May affect the skin and central nervous system.

CARCINOGENICITY: NTP? No , IARC Monographs? No , OSHA Regulated? No CARCINOGENICITY/OTHER INFORMATION No data available. RECOMMENDED EXPOSURE LIMITS: See "Section II" LD 50/LC 50: No toxicity data recorded. SIGNS AND SYMPTOMS OF EXPOSURE

INHALATION: May cause a red, dry throat, coughing, dry mouth, 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 and nausea.

SKIN: May cause redness and itching.

EYE: May cause redness, itching and watering.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Pre-existing skin disorders

EMERGENCY AND FIRST AID PROCEDURES

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

http://asp.cerac.com/CatalogNet/default.aspx?p=msdsFile&msds=m001363.htm

INGESTION: Give 1-2 glasses of milk or water and induce vomiting; seek medical attention immediately. 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; seek medical attention if symptoms persist.

EYE: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.

NOTE TO PHYSICIAN

No data available.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE Tin telluride, powder and pieces

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wear appropriate respiratory and protective equipment specified in section VIII-control measures. 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 proper disposal. Take care not to raise dust.

WASTE DISPOSAL METHOD

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

HAZARD LABEL INFORMATION:

Store in cool, dry area Store in tightly sealed container Wash thoroughly after handling **PRECAUTIONS TO BE TAKEN IN HANDLING**

None <u>PRECAUTIONS TO BE TAKEN IN STORING</u> No data available. <u>OTHER PRECAUTIONS</u>

None

SECTION VIII- CONTROL MEASURES Tin telluride, powder and pieces

PROTECTIVE EQUIPMENT SUMMARY - HAZARD LABEL INFORMATION:

NIOSH approved respirator Impervious gloves Safety glasses Clothes to prevent skin contact **RESPIRATORY EQUIPMENT (SPECIFY TYPE)**

NIOSH - approved respirator

VENTILATION

Local Exhaust: Local exhaust ventilation may be necessary to control any air contaminants to within their PELs or TLVs during the use of this product. Special: None

Mechanical (Gen): Good general ventilation is recommended.

Other: None

EYE PROTECTION

Safety glasses

PROTECTIVE GLOVES

Rubber gloves

OTHER PROTECTIVE CLOTHING

Protective gear suitable to prevent contamination

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 and smoking. Do not blow dust off clothing or skin with compressed air.

SECTION IX - ADDITIONAL COMMENTS Tin telluride, powder and pieces

HMIS HAZARD RA	TINGS:		
Health:	— 2	Minimal:	0
Flammability:	0	Slight: Moderate	1 : 2
Reactivity:	0	Serious: Extreme:	3
Protection:	E		

The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change, and the conditions of handling and use or misuse are beyond our control, PROCHEM MAKES NO WARRANTY. EITHER EXPRESSED NOR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN, AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. Users should satisfy themselves that they have all current data relevant to their particular use.

Abbreviations used: NA=Not Applicable NE: Not Established