



## Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 1049

Review date: October 5, 2016

### 1 Identification of substance and company

**Product name:** **Tin metal, fine powder**  
**Product code:** 11603, 11764, 12529, 17255  
**Relevant identified uses of the substance:** Research and product development  
**Manufacturer/Supplier:** Noah Technologies Corporation  
1 Noah Park  
San Antonio, Texas 78249-3419  
Phone: 210-691-2000  
Fax: 210-691-2600  
Web site: www.noahtech.com

**Emergency information:** CHEMTREC  
800-424-9300

### 2 Hazards identification

#### Emergency Overview:



**Signal word(s):** Warning  
**Pictogram(s):** Exclamation mark  
**Hazard statements:** H319: Causes serious eye irritation  
H335: May cause respiratory irritation  
**Precautionary statements:** P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
P264: Wash skin thoroughly after handling  
P271: Use only outdoors or in a well-ventilated area  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P304 + P340 + P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312: Call a POISON Center or doctor/physician if you feel unwell.  
P337 + P313: If eye irritation persists: Get medical advice/attention  
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.  
P405: Store locked up  
P501: Dispose of contents/container in accordance with local/state/federal/national/international regulations

**Hazards not otherwise classified:** None  
**GHS Classification:** Eye irritation - 2A  
Specific target organ toxicity - single exposure - 3, respiratory system

**HMIS ratings (scale 0-4):**  
Health hazard: 1  
Flammability: 0  
Physical hazard: 0

### 3 Composition/Information on ingredients

**Chemical name:** Tin metal  
**Designation: (CAS#):** 7440-31-5  
**EC number:** 231-141-8  
**Formula:** Sn  
**Synonyms:** Stannum

### 4 First aid measures

**After inhalation:** Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Only qualified personnel should administer oxygen. Get medical attention.

**After skin contact:** Wash with soap and water. If irritation persists seek medical advice.

**After eye contact:** Rinse opened eye for at least 15 minutes under running water. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, seek medical advice.

**After ingestion:** If conscious, rinse mouth out with water. Never give anything by mouth to an unconscious person. Seek medical advice.

**Most important symptoms and effects, both acute and delayed:** Inhalation of tin dust may cause a benign type of pneumonia called stannosis. Inorganic tin compounds are primarily skin irritants. Eye contact may result in short-term irritation. Ingestion of considerable quantities of powdered tin may cause vomiting, but is a low hazard for permanent injury.

Indication of any immediate medical attention and special treatment needed:

No data available

#### 5 Fire-fighting measures

**Suitable and unsuitable extinguishing agents:** Use water spray, carbon dioxide, dry chemical, earth, sand, or foam. Use extinguishing media most suitable to surrounding conditions.

**Special hazards caused by the material, its products of combustion or resulting gases:** Oxides of tin

**Special fire fighting procedures:** Wear self-contained breathing apparatus. Always wear full fire fighting equipment/clothing in fire situations

#### 6 Accidental release measures

**Person-related safety precautions:** Always wear personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray.

**Measures for environmental protection:** Prevent spread or spill. Sweep or scoop up and remove. Avoid raising dust. Ventilate area and wash spill after material pickup is complete. Do not allow material to be released to proper the environment without governmental permits.

**Measures for cleaning/collecting:** Sweep or scoop up and remove. Keep in suitable, closed containers for disposal. Dispose of contaminated material as waste according to item 13

**Additional information:**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protective equipment  
See Section 13 for information on disposal  
See Section 15 for regulatory information

#### 7 Handling and storage

**Information for safe handling:** Keep container tightly sealed. Store in cool, dry place. Ensure good ventilation/exhaust at the workplace

**Storage requirements to be met by storerooms and containers:** No special requirements.

**Incompatibility (avoid contact with):** Strong acids, oxidizers, bases, halogens, interhalogens, cupric nitrate, sodium and potassium peroxide can produce incandescence with sulfur

**Further information about storage conditions:** air and moisture sensitive

#### 8 Exposure controls/personal protection

**Ventilation requirements:** Always maintain exposure below permissible exposure limits. Local exhaust.

**Components with exposure limits that require monitoring:**  
ACGIH TLV: TWA 2 mg(Sn)/m3  
OSHA PEL: TWA 2 mg(Sn)/m3

**Additional information:** None

**General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be adhered to  
Keep away from foodstuffs, beverages and food  
Instantly remove any soiled and impregnated garments  
Wash hands during breaks and at the end of the work  
Avoid contact with the eyes and skin

**Personal protective equipment:**

**Respiratory protection:** Only use NIOSH/MESA or CEN approved equipment. For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.

**Hand protection:** Neoprene / Natural rubber / Impervious

**Eye protection:** Safety glasses / goggles

**Skin protection:** Protective work clothing

**Additional protective equipment:** Sufficient to prevent contact. Emergency eyewash and safety shower.

#### 9 Physical and chemical properties

**Physical state:** Powder  
**Color:** Silvery white to gray  
**Odor:** Odorless  
**Molecular Weight (Calculated):** 118.71  
**pH** Not determined  
**Melting point/freezing point/range:** 231.9 C  
**Boiling point/range:** 2270 C  
**Sublimation temperature/start:** Not determined  
**Flash point:** Non-flammable but is a dust explosion hazard  
**Autoignition temperature:** Not determined  
**Danger of explosion:** Not determined  
**Flammable limits:** Not determined  
**Lower:** Not determined  
**Upper:** Not determined  
**Evaporation Rate:** Not determined  
**Vapor pressure (mm Hg):** 1 mmHg @ 1492 C  
**Specific gravity:** 7.31  
**Solubility in/Miscibility with water:** Insoluble

#### 10 Stability and reactivity

<b>Chemical stability:</b>	Stable
<b>Conditions to be avoided:</b>	Water / Moisture, air See section 7 for information on proper handling and storage
<b>Materials to be avoided:</b>	Strong acids, oxidizers, bases, halogens, interhalogens, cupric nitrate, sodium and potassium peroxide can produce incandescence with sulfur
<b>Hazardous Decomposition products:</b>	Oxides of tin

#### 11 Toxicological information

<b>LD/LC50 values that are relevant for classification:</b>	No data available
<b>Primary irritant or corrosive effect: on the skin:</b>	Mild irritation
<b>on the eye:</b>	Mild irritation
<b>Potential health effects:</b>	
<b>Inhalation:</b>	Material is irritating to mucous membranes and upper respiratory tract
<b>Signs and symptoms of exposure:</b>	Inhalation of tin dust may cause a benign type of pneumonia called stannosis. Inorganic tin compounds are primarily skin irritants. Eye contact may result in short-term irritation. Ingestion of considerable quantities of powdered tin may cause vomiting, but is a low hazard for permanent injury. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known
<b>Carcinogenicity:</b>	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

#### 12 Ecotoxicological information

<b>General Notes:</b>	No ecological data available
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#### 13 Disposal considerations

<b>Recommendation:</b>	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste Must be specially treated under adherence to official regulations
<b>Unclean packagings recommendation:</b>	Disposal must be made according to official regulations

#### 14 Transport information

##### Land transport DOT

<b>Proper shipping name:</b>	Chemicals Non-Hazardous
<b>Technical name:</b>	Tin metal powder

##### Air transport ICAO-TI and IATA-DGR:

<b>Proper shipping name:</b>	Chemicals Non-Hazardous
<b>Technical name:</b>	Tin metal powder

##### UPS Ground / FedEx Ground

<b>Proper shipping name:</b>	Chemicals Non-Hazardous
<b>Technical name:</b>	Tin metal powder

##### UPS Air

<b>Proper shipping name:</b>	Chemicals Non-Hazardous
<b>Technical name:</b>	Tin metal powder

#### 15 Regulatory information

<b>SARA Section 302 Extremely Hazardous components and corresponding TPQs:</b>	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
<b>SARA Section 311 / 312 hazards:</b>	Acute health hazard
<b>SARA Section 313 components:</b>	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313
<b>California Proposition 65 components:</b>	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

#### 16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.