

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Tungsten Ditelluride

**Product Code:** W-TE2-05-WF

**CAS Number:** 12067-76-4

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

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## SECTION 2. HAZARDS IDENTIFICATION

Routes of entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes

Signs and Symptoms of Overexposure:

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, sweat and urine, loss of appetite, sleepiness and nausea.

Skin: May cause redness and itching.

Eye: May cause redness and itching.

Health Hazards (Acute and Chronic):

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, 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  
Medical Conditions Aggravated by Exposure: Pre-existing skin disorders.  
Hazard symbols:



T Toxic

Risk phrases:

Toxic if swallowed.

Irritating to eyes, respiratory system and skin.

Safety phrases:

When using do not eat or drink.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing and gloves.

In case of accident or if you feel unwell, seek medical advice immediately.

This material and its container must be disposed of as hazardous waste.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular weight: 439.05

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### SECTION 4. FIRST AID MEASURES

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. Seek medical attention if symptoms persist.

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### SECTION 5. FIREFIGHTING MEASURES

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.

Unusual Fire and Explosion Hazards:

When heated to decomposition, tungsten telluride may emit toxic fumes of tellurium.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

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.

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## **SECTION 7. HANDLING AND STORAGE**

Precautions:

Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible.

Avoid contact with skin and eyes

Storage:

No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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.

Mechanical (General): Recommended.

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.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical States: Solid

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

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

Evaporation Rate: N/A Flash Point: N/A

Solubility in water: Insoluble

Appearance and odor: Black crystalline pieces, no odor.

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## **SECTION 10. STABILITY AND REACTIVITY**

Stability: Stable

Conditions to Avoid (instability): None  
Incompatibility (materials to be avoided): None recorded  
Hazardous Decomposition or Byproducts: Fumes of tellurium.  
Hazardous Polymerization: Will not occur  
Conditions to avoid (hazardous polymerization): None

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

See Section 2

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## **SECTION 12. ECOLOGICAL INFORMATION**

Elimination information (persistence and degradability)  
no data available  
Ecotoxicity effects  
no data available  
Further information on ecology  
no data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Product  
Observe all federal, state, and local environmental regulations.  
Contaminated packaging  
Dispose of as unused product.

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## **SECTION 14. EXPOSURE CONTROLS/PERSONAL PROTECTION**

DOT regulations:  
Hazard class: 6.1  
Identification number: UN3288  
Packing group: III  
Proper shipping name (technical name): TOXIC SOLID, INORGANIC, N.O.S. (Tungsten telluride)  
Label 6.1  
Land transport ADR/RID (cross-border)  
ADR/RID class: 6.1 (T5) Toxic substances  
Danger code (Kemler): 60  
UN-Number: 3288  
Packaging group: III  
Description of goods: 3288 TOXIC SOLID, INORGANIC, N.O.S. (Tungsten telluride)  
Maritime transport IMDG:  
IMDG Class: 6.1  
UN Number: 3288  
Label 6.1  
Packaging group: III  
Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Tungsten telluride)

Air transport ICAO-TI and IATA-DGR:  
ICAO/IATA Class: 6.1  
UN/ID Number: 3288  
Label 6.1  
Packaging group: III  
Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Tungsten telluride)

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## SECTION 15. REGULATORY INFORMATION

Hazard symbols:

T Toxic

Risk phrases:

25 Toxic if swallowed.

36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

20 When using do not eat or drink.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37 Wear suitable protective clothing and gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately.

60 This material and its container must be disposed of as hazardous waste.

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.

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.