SAFETY DATA SHEET

Date Printed: 05/04/2024
Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Diisopropyl Telluride

Product Code: DIP-TE-05

CAS Number: 51112-72-2

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

SECTION 2. HAZARDS IDENTIFICATION

Hazard - Risk Classification-
Flammable Liquids: Category 3
Acute Toxicity(Oral): Category 2
Skin Corrosion/Irritation: Category 2
Serious eye damage/eye irritation: Category 2A
Label elements including precautionary statements
Symbol:

Signal Word: Danger
Hazard - Risk Statement
H226 Flammable liquid and Vapor
H300
Fatal if swallowed
H315
Causes skin irritation
H319
Causes serious eye irritation
Precautionary Statement

Prevention
P210
Keep away from heat/sparks/open flames/hot surfaces.
No smoking.
P233
Keep container tightly closed.
P240
Ground/bond container and receiving equipment.
P241
Use explosion-proof electrical/ventilating/lighting/.../ equipment.
P242
Use only non-sparking tools.
P243
Take precautionary measures against static discharge.
P264
Wash ... thoroughly after handling.
P270
Do not eat, drink or smoke when using this product.
P280
Wear protective gloves/protective clothing/eye protection/face protection.
Response
P321
Specific treatment (see ... on this label).
P330
Rinse mouth.
P362
Take off contaminated clothing and wash before reuse.
P301+P310
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352
IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353
IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P305+P351+P338
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313
If skin irritation occurs: Get medical advice/attention.
P337+P313
If eye irritation persists: Get medical advice/attention.
P370+P378
In case of fire: Use ... for extinction.
Storage
P405
Store locked up.
P403+P235
Store in a well-ventilated place. Keep cool.
P501
Dispose of contents/container to ...
Other Hazard - Risk which are not included in the classification criteria (e.g. dust explosion hazard):
NFPA Rating
Health Hazard: 3
Fire: 3

Reactivity Hazard: 1

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Diisopropyltelluride
Other name: 2,2'-tellurobispropane
Isopropyl telluride
Diisopropyltellurium
Diisopropyl telluride
Molecular Formula: Te[CH(CH3)2]2

SECTION 4. FIRST AID MEASURES

Eye contact
Immediately flush the eyes with copious amounts of water for at least 10-15 minutes.
A victim may need assistance in keeping their eye lids open.
Get immediate medical attention.
Skin contact
Wash off immediately with plenty of water for at least 15 minutes.
Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay.
Inhalation
Remove the victim to fresh air.
Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain.
In such cases seek immediate medical assistance.
Ingestion
Never give anything by mouth to an unconscious person.
Immediately give large quantities of water to drink.
Induce vomiting if person is conscious. Prevent aspiration of vomit.
Turn victim's head to the side.
Indication of immediate medical attention and notes for physician
Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated.
If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

SECTION 5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media
Suitable: carbon dioxide or dry powder
Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products):
Products of Combustion: CO, CO2, tellurium oxide
Special protective equipment and precautions for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear suitable protective clothing, gloves and eye/face protection.
Use self-contained breathing apparatus and chemically protective clothing.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Environmental precautions and protective procedures
Do not allow material to enter drains or streams.
Methods and materials for containment and cleaning up
Approach suspected leak areas with caution.
Absorb with inert absorbent materials such as: Dry sand, Vermiculite, Activated charcoal.
Place in appropriate chemical waste container.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes.
Avoid inhalation of vapor or mist.
Keep away from sources of ignition - No smoking.
Take measures to prevent the build up of electrostatic charge.
Keep away from incompatibles such as oxidizing agent, acids.

Conditions for safe storage (including any incompatibilities)
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.
Do not store together with oxidizing
Protect from humidity and water.
Keep container tightly sealed

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters (e.g. occupational exposure limit values, biological limit values)
Tellurium and compounds (as Te)
- ACGIH: TWA - 0.1 mg/m3
- OSHA: TWA - 0.1 mg/m3
- NIOSH: TWA - 0.1 mg/m3(10h)

Appropriate engineering controls
Maintain process conditions to ensure temperature is below product flashpoint.
Ensure adequate ventilation.
Provide readily accessible eye wash stations and safety showers.
Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure
Personal protective equipment
Respiratory protection
Use respirators and components tested and approved under appropriate government shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination(US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.
Eye protection
Chemical safety goggles.

Hands protection
Compatible chemical-resistant gloves.
Body protection Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state: Liquid
Color: Yellow
Odor: garlic odor
Odor threshold: No data available
pH: No data available
Melting point/freezing point: -55oC
Initial boiling point and boiling range: 49oC at 14torr
Flashing point: 28 oC
Evaporation rate: No data available
Flammability (solid, gas): N/A
Upper/lower flammability or explosive limits: No data available
Vapor pressure: 2.6 torr at 20 oC
Solubility in water: Insoluble
Vapor density: No data available
Relative density: 1.365 g/ml
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Formula mass: 213.77 g/mol

SECTION 10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions: Stable in sealed containers
stored under a dry inert atmosphere.
Possibility of hazardous reactions: Can decompose when exposed to light.
Conditions to avoid (e.g. static discharge, shock or vibration, etc) Incompatible materials: Heat, flames, light and sparks.
Incompatible materials: Strong oxidizing agents 10.5 Hazardous decomposition products: CO, CO2, tellurium oxide

---

SECTION 11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure
No data available
Health hazards information
- Acute toxic: Tellurium and compounds (as Te)
Oral: 83 mg/Kg – Rat LD50
67 mg/Kg – Rabbit LD50
45 mg/Kg – Guinea pig LD50
20 mg/Kg – Mouse LD50
Dermal: No data available

Inhalation: No data available
- Skin corrosive/irritant: Can cause severe burns to the skin.
- Serious eye damage/eye irritation: Can cause serious damage to eyes.
- Respiratory sensitization: No data available
- Skin sensitization: No data available
- Carcinogenicity: No data available
- Germ Cell Mutagenicity : No data available
- Reproductive toxicity: No data available
- Specific target organ toxicity (single exposure): No data available
- Specific target organ toxicity (repeated exposure): No data available
- Aspiration hazard: No data available

SECTION 12. ECOLOGICAL INFORMATION

Aquatic and terrestrial ecotoxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Other adverse effects: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal method
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION 14. TRANSPORT INFORMATION

UN number: 3284
UN proper shipping name: Tellurium compounds N.O.S. (Diisopropyltelluride)
Transport hazard class: 6.1
Packing group (if applicable): II
Marin pollution (yes/no): No data available
Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: - F-A / S-A

SECTION 15. REGULATORY INFORMATION

Industrial Safety and Health Act: Exposure limits Setting materials
Toxic Chemical Control Act: Title compound not listed.
Dangerous Material Safety Control Act: Title compound not listed.
Wastes Management Act: Title compound not listed.
Other requirements in domestic and other countries
- EPCRA 302 regulations: Tellurium 500/10000 LBS TPQ
- EPCRA 304 regulations: Tellurium 1 LBS RQ

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.