

LTS (CHEMICAL) INC.  
MATERIAL SAFETY DATA SHEET  
SILVER TELLURIDE

GENERAL

MANUFACTURER/SUPPLIER: LTS RESEARCH LABORATORIES, INC.

COMPANY'S STREET: 37 RAMLAND ROAD  
COMPANY'S CITY: ORANGEBURG  
COMPANY'S STATE: NEW YORK  
COMPANY'S ZIP CODE: 10962  
EMERGENCY CHEMTREC #: 800-262-8200  
COMPANY'S EMERGENCY TEL. #: 800-424-9300 (LOCAL)  
703-527-3887 (INTERNATIONAL)  
COMPANY'S TEL #: 845-494-2940  
DATE MSDS PREPARED: 11/1/12

1. PRODUCT IDENTIFICATION

PRODUCT NAME: SILVER TELLURIDE  
SYNONYMS: DISILVER TELLURIDE, TELLURODISILVER  
FORMULA:  $\text{Ag}_2\text{Te}$   
CAS #: 12002-99-2  
MOLECULAR WEIGHT: 343.34

2. PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: N/A  
MELTING POINT: 955C  
SPECIFIC GRAVITY ( $\text{H}_2\text{O}=1$ ): 8.5 g/cm<sup>3</sup>  
VAPOR DENSITY: N/A  
VAPOR PRESSURE: 0.001 mmHg  
EVAPORATION RATE: N/A  
% VOLATILES: N/A  
SOLUBILITY IN  $\text{H}_2\text{O}$ : INSOLUBLE  
APPEARANCE AND ODOR: BLACK, SPUTTERING TARGET, PIECES, POWDER, ODORLESS

3. HAZARD IDENTIFICATION

HAZARD DESCRIPTION: T TOXIC  
RISK PHRASES: R23/24/25 TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED  
HMIS RATINGS:  
HEALTH: 0  
FLAMMABILITY: 0  
REACTIVITY: 0

4. FIRE FIGHTING MEASURES

FLASH POINT: N/A  
AUTOIGNITION TEMPERATURE: N/A  
FLAMMABLE LIMITS:  
UPPER: N/A  
LOWER: N/A  
EXTINGUISHING MEDIA: PRODUCT IS NOT FLAMMABLE. USE FIREFIGHTING MEASURES THAT SUIT THE CURROUNDING FIRE. USE WATER SPRAY, ALCOHOL RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE  
SPECIAL HAZARDS: IN CASE OF FIRE, TELLURIUM OXIDE MAY BE RELEASED

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## 5. HEALTH HAZARD INFORMATION

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EMERGENCY OVERVIEW:	MAY BE HARMFUL IF SWALLOWED. CHRONIC EXPOSURE MAY LEAD TO A SKIN DISCOLORATION. INHALATION OF DUST MAY CAUSE GARLIC ODOR OF BREATH, METALLIC TASTE, SLEEPINESS, HEADACHE AND NAUSEA.
PRIMARY ROUTES OF EXPOSURE:	INGESTION , INHALATION, SKIN, AND EYES.
EYE CONTACT:	MAY BE A MILD TO MODERATE IRRITANT TO THE EYES.
SKIN CONTACT:	MAY CAUSE SLIGHT IRRITATION OF THE SKIN.
INHALATION:	INHALATION OF DUST CAN LEAD TO IRRITATION OF THE RESPIRATORY TRACT GARLIC ODOR OF BREATH, METALLIC TASTE, SLEEPINESS, HEADACHE AND NAUSEA.
INGESTION:	INGESTION OF ONLY MODERATE AMOUNTS OF TELLURIUM MAY LEAD TO NAUSEA, VOMITING, BLOODY DIARRHEA, WEAKNESS, AND DEATH.
ACUTE HEALTH EFFECTS:	MAY CAUSE GARLIC ODOR OF BREATH, METALLIC TASTE, SLEEPINESS, HEADACHE AND NAUSEA.
CHRONIC HEALTH EFFECTS:	LONG TERM EXPOSURE TO SILVER AND SILVER SALTS CAN LEAD TO THE CONDITION KNOWN AS ARGYRIA-A GENERAL GRAY PIGMENTATION OF THE SKIN AND MUCOUS MEMBRANES. PROLONGED EXPOSURE TO TELLURIUM MAY CAUSE DROWSINESS AND LOSS OF APPETITE. SOLUBLE TELLURIUM COMPOUNDS CAN BE ABSORBED THROUGH THE SKIN, AS WELL AS INHALED OR INGESTED AS A FUME. EXPOSURE CAN PRODUCE MILD GASTROINTESTINAL DISTRESS, GARLIC ODOR OF THE BREATH, DRYNESS OF THE MOUTH, METALLIC TASTE AND DROWSINESS.

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## 6. STABILITY

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STABILITY:	STABLE
CONDITIONS TO AVOID:	NONE
MATERIAL TO AVOID:	STRONG MINERALS, OXIDIZING AGENTS
DANGEROUS REACTIONS:	NONE KNOWN
HAZARDOUS DECOMPOSITION PRODUCTS:	TELLURIUM OXIDE

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## 7. EMERGENCY AND FIRST AID PROCEDURES:

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INHALATION:	REMOVE TO FRESH AIR AND PROVIDE ARTIFICIAL RESPIRATION IF NECESSARY. SEEK IMMEDIATE MEDICAL ADVICE.
INGESTION:	SEEK IMMEDIATE MEDICAL ATTENTION.
SKIN:	WASH SKIN THOROUGHLY WITH MILD SOAP AND WATER. RINSE THOROUGHLY. SEEK IMMEDIATE MEDICAL ADVICE.
EYE:	FLUSH EYES WITH PLENTY OF WATER. SEEK IMMEDIATE MEDICAL ADVICE.

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## 8. HANDLING AND STORAGE

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HANDLING & STORAGE:	STORE IN A COOL, DRY PLACE IN TIGHTLY SEALED CONTAINERS. ENSURE GOOD VENTILATION. NO SPECIAL REQUIREMENTS ARE NECESSARY IF USED CORRECTLY.
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## 9. SPILL OR LEAK PROCEDURES

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STEPS TO BE TAKEN IN  
CASE MATERIAL IS

RELEASED OR SPILLED:

RESPIRATION:

VENTILATION:

PROTECTIVE GLOVES:

EYE PROTECTION:

PROTECTIVE CLOTHING:

WEAR NIOSH APPROVED DUST-MIST VAPOR RESPIRATOR.  
LOCAL EXHAUST TO MAINTAIN CONCENTRATION AT OR  
BELOW THE PEL, TLV.

RUBBER GLOVES.

SAFETY GLASSES

PROTECTIVE GEAR SUITABLE TO PREVENT  
CONTAMINATION.

WASTE DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND  
FEDERAL REGULATIONS.

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10. TOXICITY DATA

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OSHA (PEL)

0.1mg/m<sup>3</sup> (AS Te)

ACGIH (TWA)

0.1mg/m<sup>3</sup> (AS Te)

TLV

0.1mg/m<sup>3</sup> (AS Te)

CARCINOGENICITY:

NO CLASSIFICATION DATA ON CARCINOGENIC PROPERTIES  
OF THIS MATERIAL IS AVAILABLE FROM THE EPA, IARC,  
NTP.

ADDITIONAL INFORMATION:

TO THE BEST OF OUR KNOWLEDGE THE ACUTE AND  
CHRONIC TOXICITY OF THIS SUBSTANCE IS NOT FULLY  
KNOWN.

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11. TRANSPORTATION DATA

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REGULATED FOR POWDER

PROPER SHIPPING NAME:

TOXIC SOLID, INORGANIC, N.O.S.

UN NUMBER:

3288

HAZARD CLASS:

6.1

PACKING GROUP:

III

ADR//RID CLASS:

6.1 (T5) TOXIC SUBSTANCES

IMDG CLASS:

6.1

ICAO/IATA CLASS:

6.1

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12. OTHER INFORMATION

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THIS SAFETY DATA SHEET SHOULD BE USED IN CONJUNCTION WITH TECHNICAL SHEETS. IT DOES NOT REPLACE THEM. THE INFORMATION GIVEN IS BASED ON OUR KNOWLEDGE OF THIS PRODUCT, AT THE TIME OF PUBLICATION. IT IS GIVEN IN GOOD FAITH. THE ATTENTION OF THE USER IS DRAWN TO THE POSSIBLE RISKS INCURRED BY USING THE PRODUCT FOR ANY OTHER PURPOSE OTHER THAN THAT FOR WHICH IT WAS INTENDED. THIS DOES NOT IN ANY WAY EXCUSE THE USER FROM KNOWING AND APPLYING ALL THE REGULATIONS GOVERNING HIS ACTIVITY. IT IS THE SOLE RESPONSIBILITY OF THE USER TO TAKE ALL PRECAUTIONS REQUIRED IN HANDLING THE PRODUCT. THE AIM OF THE MANDATORY REGULATIONS MENTIONED IS TO HELP THE USER TO FULFILL HIS OBLIGATIONS REGARDING THE USE OF HAZARDOUS PRODUCTS.