

SAFETY DATA SHEET

1. Identification

1. Idonanou lon			
Product identifier	Tin telluride pieces		
Other means of identification SDS number	2CZ		
Materion Code	2CZ		
CAS number	12040-02-7		
Synonyms	Tin telluride (SnTe) * Tin tellu	ıride	
Manufacturer/Importer/Supplier/Dis			
Manufacturer			
Company name Address	Materion Advanced Chemica 407 N 13th Street 1316 W. St. Paul Avenue Milwaukee, WI 53233 United States	ls Inc.	
Telephone	414.212.0257		
E-mail	advancedmaterials@materion.com		
Contact person	Noreen Atkinson		
Emergency phone number	Chemtrec	800.424.9300	
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Skin corrosion/irritation		Category 1
	Serious eye damage/eye irrit	ation	Category 1
Environmental hazards	Hazardous to the aquatic environment of the second	vironment,	Category 3
OSHA defined hazards	Not classified.		
Label elements			
Signal word	Danger		
Hazard statement	Causes severe skin burns an with long lasting effects.	d eye damage. C	auses serious

erious eye damage. Harmful to aquatic life Precautionary statement Prevention Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all Response contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Storage Store locked up. Disposal Dispose of contents/container in accordance with local/regional/national/international regulations. Hazard(s) not otherwise None known. classified (HNOC)

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Tin telluride	Tin telluride (SnTe)	12040-02-7	100
	Tin telluride		

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

• ·	
4. First-aid measures	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. For minor skin contact, avoid spreading material on unaffected skin.
Eye contact	Rinse cautiously with water for several minutes. Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Corrosive effects. Irritation of eyes and mucous membranes. May cause temporary blindness and severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Water.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
Fire fighting equipment/instructions	In the event of fire, cool tanks with water spray. Water runoff can cause environmental damage.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
General fire hazards	No unusual fire or explosion hazards noted.
6. Accidental release measu	ures
Personal precautions, protective equipment and emergency procedures	Local authorities should be advised if significant spillages cannot be contained. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.
Methods and materials for	Stop the flow of material, if this is without risk. Collect spillage. Prevent product from entering

containment and cleaning up

Environmental precautions

recovery, flush area with water. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

drains. Prevent entry into waterways, sewer, basements or confined areas. Following product

7. Handling and storage

Precautions for safe handling Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage,
including any incompatibilitiesStore locked up. Keep container tightly closed. Store in a cool, dry place out of direct sunlight.
Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

Material	Туре	Value
Tin telluride (CAS 12040-02-7)	PEL	0.1 mg/m3
Biological limit values	No biological exposure limits noted for	r the ingredient(s).
Appropriate engineering controls	Provide eyewash station.	
Individual protection measures, sur Eye/face protection	ch as personal protective equipment Wear eye/face protection.	
Skin protection Hand protection	Wear protective gloves. Not normally	needed.
Other	Wear appropriate chemical resistant of thermal protection.	clothing. Wear protective gloves. It may provide little or no
Respiratory protection	Wear suitable respiratory protection.	
Thermal hazards	Not available.	
General hygiene considerations	skin. Do not get this material on cloth	ke. Do not get in eyes. Do not get this material in contact with ing. Wash hands before breaks and immediately after rdance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explos	ive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.

Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Molecular formula	SnTe
10. Stability and reactivity	
Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None under normal conditions.
Incompatible materials	None known.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes severe eye burns. Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Permanent eye damage including blindness could result.
Information on toxicological effects	
Acute toxicity	Causes severe skin burns and eye damage.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes severe eye burns. Causes serious eye damage.
Respiratory or skin sensitization	
Respiratory sensitization	Due to lack of data the classification is not possible.
Skin sensitization	Due to lack of data the classification is not possible.
Germ cell mutagenicity	Due to lack of data the classification is not possible.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
IARC Monographs. Overall Eva	aluation of Carcinogenicity
Not listed.	
OSHA Specifically Regulated S	Substances (29 CFR 1910.1001-1050)
Not regulated.	
	am (NTP) Report on Carcinogens
Not listed.	
Reproductive toxicity	Due to lack of data the classification is not possible.

Specific target organ toxicity - single exposure	Due to lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to lack of data the classification is not possible.
Aspiration hazard	Due to lack of data the classification is not possible.
12. Ecological information	
Ecotoxicity	Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	Not available.
Mobility in soil	Not available.
Other adverse effects	Not available.
13. Disposal considerations	
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
14. Transport information	
DOT	
Not regulated as dangerous g	joods.
ΙΑΤΑ	
Not regulated as dangerous g	joods.
IMDG	
Not regulated as dangerous g	loods.
15. Regulatory information	
US federal regulations	CERCLA/SARA Hazardous Substances - Not applicable.
	All components are on the U.S. EPA TSCA Inventory List.
TSCA Section 12(b) Export N	otification (40 CFR 707, Subpt. D)
Not regulated.	
CERCLA Hazardous Substan	ce List (40 CFR 302.4)
Not listed. SARA 304 Emergency releas	e notification
Not regulated.	
-	Substances (29 CFR 1910.1001-1050)
Not regulated.	
Superfund Amendments and Real	uthorization Act of 1986 (SARA)
Hazard categories	Immediate Hazard - Yes

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazard	dous substance
Not listed.	
SARA 311/312 Hazardous chemical	No
SARA 313 (TRI reporting) Not regulated.	
Other federal regulations	
Clean Air Act (CAA) Section	112 Hazardous Air Pollutants (HAPs) List
Not regulated.	
Clean Air Act (CAA) Section	112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.	
Safe Drinking Water Act (SDWA)	Contaminate candidate list
US state regulations	California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Tin telluride (CAS 12040-02-7)

16. Other information, including date of preparation or last revision

Issue date	05-17-2015
Revision date	01-15-2018
Version #	03
Disclaimer	This document has been prepared using data from sources considered to be technically reliable and the information is believed to be correct. Materion makes no warranties, expressed or implied, as to the accuracy of the information contained herein. Materion cannot anticipate all conditions under which this information and its products may be used and the actual conditions of use are beyond its control. The user is responsible to evaluate all available information when using this product for any particular use and to comply with all Federal, State, Provincial and Local laws, statutes and regulations.