



SAFETY DATA SHEET

MATERION

1. Identification

Product identifier	Zinc Antimonide Pieces and Powder	
Other means of identification		
SDS number	2HV	
Materion Code	2HV	
CAS number	12039-35-9	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	Materion Advanced Chemicals Inc.	
Address	407 N 13th Street 1316 W. St. Paul Avenue Milwaukee, WI 53233 United States	
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	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger	
Hazard statement	Harmful if swallowed. Toxic if inhaled. Very toxic to aquatic life with long lasting effects.	
Precautionary statement		
Prevention	Do not breathe fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.	
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF exposed: Call a POISON CENTER or doctor/physician. Rinse mouth. Collect spillage.	
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.	
Disposal	Dispose of waste and residues in accordance with local authority requirements.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	None.	

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Zinc Antimonide Pieces and Powder		12039-35-9	100

4. First-aid measures

Inhalation	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Call a physician if symptoms develop or persist.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention immediately.
Eye contact	Flush eyes immediately with large amounts of water.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly. Seek medical advice.
Most important symptoms/effects, acute and delayed	Not available.
General information	Consult a physician. Show this safety data sheet to the doctor in attendance. Remove victim immediately from source of exposure.

5. Fire-fighting measures

Suitable extinguishing media	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	Decomposition of this product may yield metallic oxides.
Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate protective equipment and clothing during clean-up. Do not inhale vapor, fumes, or dust from the spilled material.
Methods and materials for containment and cleaning up	Not available.
Environmental precautions	Prevent entry into drains. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling	Not available.
Conditions for safe storage, including any incompatibilities	Not available.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Material	Type	Value
Zinc Antimonide Pieces and Powder (CAS 12039-35-9)	PEL	0.5 mg/m3

US. ACGIH Threshold Limit Values

Material	Type	Value
Zinc Antimonide Pieces and Powder (CAS 12039-35-9)	TWA	0.5 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value
Zinc Antimonide Pieces and Powder (CAS 12039-35-9)	TWA	0.5 mg/m3

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

Material	Type	Value
Zinc Antimonide Pieces and Powder (CAS 12039-35-9)	PEL	0.5 mg/m3

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	No exposure limits noted for ingredient(s). Observe good industrial hygiene practices.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Goggles/face shield are recommended.
Skin protection	
Hand protection	Wear gloves to prevent contact with particulate or solutions.
Other	Protective overgarments or work clothing must be worn by persons who may become contaminated with particulate during activities.
Respiratory protection	Respiratory protection may be required.
Thermal hazards	Not available.

9. Physical and chemical properties**Appearance**

Physical state	Solid.
Form	Not available.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	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 explosive 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 Sb.Zn

Molecular weight 187.14 g/mol

10. Stability and reactivity

Reactivity Not available.

Chemical stability Not available.

Possibility of hazardous reactions Not available.

Conditions to avoid Not available.

Incompatible materials Not available.

Hazardous decomposition products Not available.

11. Toxicological information

Information on likely routes of exposure

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

Acute toxicity Not available.

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Not available.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Not available.

Germ cell mutagenicity Not available.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

12. Ecological information

Ecotoxicity No ecotoxicity data noted for the ingredient(s).

Persistence and degradability Not available.

Bioaccumulative potential	Not available.
Mobility in soil	Not available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Not available.
Waste from residues / unused products	Not available.
Contaminated packaging	Not available.

14. Transport information

DOT

UN number	UN1549
UN proper shipping name	Antimony compounds, inorganic, solid, n.o.s. (Zinc Antimonide Pieces and Powder)
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Label(s)	6.1
Packing group	III
Special precautions for user	Not available.
Special provisions	35, IB8, IP3, T1, TP33
Packaging exceptions	153
Packaging non bulk	213
Packaging bulk	240

IATA

UN number	UN1549
UN proper shipping name	Antimony compound, inorganic, solid, n.o.s. (Zinc Antimonide Pieces and Powder)
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	6L
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1549
UN proper shipping name	ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S. (Zinc Antimonide Pieces and Powder)
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-A
Special precautions for user	Not available.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Zinc Antimonide Pieces and Powder (CAS 12039-35-9)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	0.006 mg/l
	0.006 mg/l

US state regulations

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

Zinc Antimonide Pieces and Powder (CAS 12039-35-9)

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

Issue date	01-04-2018
Revision date	03-20-2018
Version #	02
Disclaimer	Not available.