

SAFETY DATA SHEET

Section 1: Identification

Product name: Antimony (powder)
 Product use: For laboratory research purposes.
 Supplier: Trace Sciences International
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 CANADA
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Section 2: Hazard(s) Identification

2.1 GHS Classification

Carcinogenicity (Category 2), H351
 Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Lungs, H373
 Short-term (acute) aquatic hazard (Category 3), H402

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s):

H351 Suspected of causing cancer.
 H373 May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled.
 H402 Harmful to aquatic life.

Precautionary statement(s):

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P405 Store locked up.
 P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3: Composition/ Information on Ingredients

Formula : Sb
Molecular Weight : 121.76 g/mol

Material	CAS-No.	EC-No.	Index-No.	Concentration
Antimony	7440-36-0	231-146-5	-	<=100%

Section 4: First-Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move person out of dangerous area if safe to do so.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water for at least 15 minutes. Use chemical shower if available. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contacts if possible.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Section 5: Fire-Fighting Measures

5.1 Conditions of flammability

Not flammable or combustible.

5.2 Suitable extinguishing media

Use metal fire spray. Do not use water

5.3 Hazardous combustion products

Hazardous decomposition products formed under fire conditions: Antimony oxide

5.4 Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.5 Further information

No data available

Section 6: Accidental Release Measures

6.1 Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage

Air and moisture sensitive. Handle and store under inert gas.
 Keep container tightly closed in a dry and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

8.1 Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Antimony	7440-36-0	TWA	0.5 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	0.5 mg/m ³	Canada. Ontario OELs
		TWAEV	0.5 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	0.5 mg/m ³	Canada. British Columbia OEL
		TWA	0.5 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
		TWA	0.5 mg/m ³	

Remarks

Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.

8.2 Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Specific engineering controls

Use mechanical exhaust or laboratory fume hood to avoid exposure.

Section 9: Physical and Chemical Properties

Appearance

Form	Powder
Colour	No data available

Safety Data

pH	No data available
Melting point/freezing point	Melting point/range: 630 °C (1,166 °F)
Boiling point	1,635 °C (2,975 °F)
Flash point	No data available
Flammability (solid, gas)	No data available
Ignition temperature	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Density	6.69 g/cm ³ at 25 °C (77 °F)
Water solubility	17.1 g/l at 20 °C (68 °F) - OECD Test Guideline 105 – partly soluble
Partition coefficient: n-octanol/water	No data available
Relative vapour density	No data available
Odour	No data available
Odour Threshold	No data available
Evaporation rate	No data available

Section 10: Stability and Reactivity

10.1 Chemical stability

Stable under recommended storage conditions

10.2 Possibility of hazardous reactions

No data available

10.3 Conditions to avoid

No data available

10.4 Materials to avoid

Oxidizing agents, acids, highly toxic fumes

10.5 Hazardous decomposition products

See section 5

Section 11: Toxicological Information

Acute toxicity

Oral

100 mg/kg (rat)

Inhalation

LC50 Inhalation - Rat - male and female - 4 h - > 5.2 mg/l
(OECD Test Guideline 403)

Dermal

LD50 Dermal - Rabbit - > 8,300 mg/kg

Remarks: (ECHA)

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 7 d

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: Not a skin sensitizer.

(OECD Test Guideline 406)

Germ cell mutagenicity

No data available

Carcinogenicity

Carcinogenicity - Rat - Inhalation

Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

Inhalation - The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2 – Lungs

Aspiration hazard

No data available

Signs and Symptoms of Exposure

Nausea, vomiting, headache, dizziness

Additional Information

RTECS: CC4025000

Section 12: Ecological Information

12.1 Toxicity

Toxicity to fish	Static test LC50 - Pimephales promelas (fathead minnow) - 14.4 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 423.45 mg/l - 48 h Remarks: (ECOTOX Database)
Toxicity to algae	Static test ErC50 - Pseudokirchneriella subcapitata (algae) - > 36.6 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	Static test EC50 - activated sludge - 27 mg/l - 4 h (ISO 9509)
Toxicity to fish (Chronic toxicity)	Flow-through test NOEC - Pimephales promelas (fathead minnow) - 1.13 mg/l - 28 d Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	Semi-static test NOEC - Daphnia magna (Water flea) - 1.74 mg/l - 21 d (OECD Test Guideline 211)

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

No data available

Section 13: Disposal Considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

IATA

UN number: UN2871 Class: 6.1 Packing group: III
Proper shipping name: Antimony Powder

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

Section 16: Other Information

Further information

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