Safety Data Sheet

Antimony Trichloride

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Antimony Trichloride

Synonyms/Generic Names: Antimony (III) chloride; Antimonous chloride; Antimony butter; Butter of Antimony; Trichlorostibine

SDS Number: 67.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information Contact: Ward's Science
5100 West Henrietta Rd.
PO Box 92912-9012
Rochester, NY 14692
(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Harmful by ingestion, Corrosive, Target organ effect

Target Organs: Liver

Signal Words: Danger

Pictograms:

GHS Classification:

Acute toxicity, Oral	Category 4
Skin corrosion	Category 1A
Serious eye damage	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

GHS Label Elements, including precautionary statements:

Hazard Statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/face protective/eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

Potential Health Effects

Eyes	Causes eye burns.
Inhalation	May be harmful if inhaled. Material is destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	Harmful if absorbed through skin. Causes skin burns.
Ingestion	Harmful if swallowed.

NFPA Ratings

Health	2
Flammability	0
Reactivity	1
Specific hazard	Not Available

HMIS Ratings

Health	2
Fire	0
Reactivity	1
Personal	J

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Antimony Trichloride	>99	10025-91-9	233-047-2	Cl_3Sb	228.12 g/mol

4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
Ingestion	**Do Not Induce Vomiting!** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (hydrogen chloride gas, antimony oxide) under fire conditions (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment. Avoid dust formation and breathing dust. Ensure adequate ventilation.

Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Pick up and arrange disposal without creating dust. Sweep up and shovel. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling
See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

Conditions for safe storage, including any incompatibilities
Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities). Store under inert gas. Moisture sensitive. Reacts violently with water.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Antimony Compounds	0.5 mg/m^3	TLV	ACGIH
	0.5 mg/m^3	REL	NIOSH
	0.5 mg/m^3	PEL	OSHA

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels

Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat.
Other	Not Available

Other Recommendations
Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White crystals or flakes; sharp
Odor	Unpleasant odor.
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	73.4°C (164.1°F)
Initial boiling point and boiling range	283°C (541°F) @ 1,013 hPa (760 mmHg)

Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Flammable
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	Not Available
Solubility (ies)	Soluble in water
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Heat, moisture.
Incompatible Materials	Strong acids and bases, oxidizers, aluminum, potassium, sodium, water
Hazardous Decomposition Products	Hydrogen chloride gas, antimony chloride.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	LD50 Dermal - rabbit – 1120 mg/kg
Eyes	Not Available
Respiratory	LC50 – rat - >16,000 mg/kg – 4 hours
Ingestion	LD50 Oral – rat – 525 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Redness, blistering, burning, itching, tissue destruction with slow healing.
Eyes	Redness, tearing, itching, burning, damage to cornea, conjunctivitis, loss of vision.
Respiratory	Coughing, wheezing, shortness of breath, headache, spasm, inflammation and edema of bronchi, pneumonitis.
Ingestion	Nausea, vomiting, burning, diarrhea.

Chronic Toxicity	Repeated/prolonged skin contact may cause thickening, blackening, or cracking. Repeated eye exposure may cause corneal erosion or loss of vision.
Teratogenicity	Developmental toxicity – rat – intramuscular Effects on Embryo or Fetus: Fetotoxicity (except death, e.g. stunted fetus)
Mutagenicity	Genotoxicity in vitro – Hamster – Lungs Micronucleus test Sister chromatid exchange

Embryotoxicity	Reproductive toxicity – rat – Oral Effects on Newborn: Growth statistics (e.g. reduced weight gain.
Specific Target Organ Toxicity	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	LC50 – Pimephales promelas (fathead minnow) – 9 mg/l – 96 hours
Aquatic Invertebrate	LC50 – Daphnia magna (water flea) – 10.1 mg/l – 48 hours
Terrestrial	IC50 – Tetrahymena pyriformis, Ciliate – 6 mg/l – 36 hours

Persistence and Degradability	Not Readily biodegradable
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residues.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product containers.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1733, Antimony Trichloride, Solid, 8, pg II
TDG	UN1733, ANTIMOY TRICHLORIDE, SOLID, 8, pg II
IMDG	UN1733, ANTIMOY TRICHLORIDE, SOLID, 8, pg II
Marine Pollutant	No
IATA/ICAO	UN1733, Antimony Trichloride, Solid, 8, pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Antimony Trichloride
SARA 312	Antimony Trichloride
SARA 313	Listed: Antimony Trichloride
WHMIS Canada	Class E: Corrosive material.

16. OTHER INFORMATION

Revision	Date
Revision 1	01-08-2013

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