



Fisher Science Education

A Fisher Scientific Company

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MATERIAL SAFETY DATA SHEET

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MSDS No.: AA0376
Effective Date: January 1, 2004

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	Antimony (III) Chloride
Chemical Synonyms	Antimony Trichloride
Formula	SbCl ₃
Unit Size	up to 2.5 Kg.
C.A.S. No.	10025-91-9

NFPA

HAZARD RATING
MINIMAL SLIGHT MODERATE SERIOUS SEVERE
0 1 2 3 4

CHEMTREC
800-424-9300
Day 585-226-6177

Health	3
Fire	0
Reactivity	2

HMIS *

HAZARD RATING	MINIMAL	SLIGHT	MODERATE	SERIOUS	SEVERE
	0	1	2	3	4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Antimony trichloride	>99%	0.5 mg/m ³ as Sb

DANGER! CORROSIVE! MAY BE FATAL IF ABSORBED THROUGH SKIN.

CAUSES SKIN AND EYE BURNS. HARMFUL IF INHALED OR SWALLOWED.

SECTION III PHYSICAL DATA

Melting Point (°F)	73.4°C (163°F)	Specific Gravity (H ₂ O = 1)	3.06
Boiling Point (°F)	219°C (426°F)	Percent Volatile by Volume (%)	100% (sublimes @ 49.2°C)
Vapor Pressure (mm Hg)	1 mm @ 49.2°C	Evaporation Rate (=1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	Soluble, partially hydrolyzes.		
Appearance & Odor	White deliquescent crystals or flake; sharp, unpleasant odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable solid.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Water fog; foam; carbon dioxide; dry chemical.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Water could release hydrochloric acid gas.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 157)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Reacts with moisture to give off hydrochloric acid. Extreme heat could cause the formation of corrosive and toxic chlorine gas and antimony vapor.

SECTION V HEALTH HAZARD DATA

AA0376

Threshold Limited Value

TWA: 0.05 mg/m³ as antimony and compounds as Sb (ACGIH 2001).
OSHA-PEL: 0.05 mg/m³. Toxicity data: Oral-rat: LD50: 525 mg/kg.

Effects of Overexposure

Corrosive to the skin and eyes. May cause burns. Excessive ingestion may cause gastrointestinal upset, ulcers, blood effects, liver effects, neurological effects, inflammation of mucous membranes and stomatitis. Excessive inhalation may result in inflammation of the lungs, airway obstruction, bronchospasm, chronic bronchitis, reproductive effects, cardiovascular effects, gastrointestinal upset, liver effects and neurological effects. Target organs: Liver.

Emergency and First Aid Procedures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Stable	Conditions to Avoid
		X	Moisture, excessive temperature and heat.

Incompatibility (Materials to Avoid)

Strong acids, bases, oxidizers, aluminum, potassium, sodium.

Hazardous Decomposition Products

Reacts readily with moisture, liberating hydrochloric acid. Oxides of antimony, lead, carbon and arsenic, hydrogen chloride and/or chlorine.

Hazardous Polymerization

Conditions to Avoid

May Occur	Will Not Occur
	X

Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Recover for use if not contaminated. Sweep up and cover with sodium bicarbonate. After covering with sodium bicarbonate, place in a plastic bag or lined container for proper disposal. Flush spill area with water.

Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved chemical landfill or contract with a licensed waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) Work in fume hood or if dusty or fume conditions prevail, wear NIOSH/MSHA-approved dust mask or respirator. Use acid type respirator.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves Rubber. **Eye Protection** Chemical safety goggles.

Other Protective Equipment Face shield, goggles, lab coat, ventilation hood, proper gloves, eye wash station.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Store in a cool, dry, well-ventilated area away from fire hazards. Keep out of contact with moisture. Wash thoroughly after handling.

Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Avoid inhalation. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing.

D.O.T. ANTIMONY TRICHLORIDE, SOLID, 8, UN1733, PG II

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

Revision No. 8 Date 01/01/04 Approved Michael Raszeja Chemical Safety Coordinator MR
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