

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 78.00

Revision Date: April 28, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Antimony Pentachloride

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Antimony pentachloride

Synonym: antimonie pentachloride

CAS#: 7647-18-9

### SECTION 3 — HAZARDS IDENTIFICATION

Yellow, fuming liquid. Strong chlorine odor.

Moderately toxic by inhalation and ingestion. Corrosive. May cause skin burns.

Reacts violently with water. When heated to decomposition, emits toxic fumes of Cl and Sb.

#### FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-2

Exposure-3

Storage-2

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Do NOT induce vomiting. Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable liquid.

When heated to decomposition, emits toxic fumes of Cl and Sb.

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

None

established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Remove all ignition sources and water. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates, and phosphates. Store in a Flinn Chem-Saf bag inside a Flinn Saf-Stor can. Store in a cool, dry place. Use and dispense in a hood.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: TWA 0.5 mg/m<sup>3</sup> (as Sb) (OSHA)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Yellow, fuming liquid with an offensive odor.  
Solubility: Soluble in chloroform. Decomposes in water.  
Formula: SbCl<sub>5</sub>  
Formula weight: 229.04

Boiling point: 140 °C  
Melting point: 2.8 °C  
Specific gravity: 2.3

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with heat and alcohols; reacts violently with water.  
Fumes in moist air.  
Shelf life: Poor.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Highly toxic, corrosive.  
Chronic effects: Possible mutagen.  
Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 1115 mg/kg  
IHL-RAT LC<sub>50</sub>: 720 mg/m<sup>3</sup>/2H  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

**SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Please review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method #27d is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Antimony pentachloride, liquid  
Hazard class: 8, Corrosive  
UN number: UN1730  
N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (231-601-8), RCRA code D002, D003.

**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**