

SAFETY DATA SHEET

Creation Date 24-Nov-2010

Revision Date 19-Jan-2018

Revision Number 3

1. Identification

Product Name Antimony pentachloride

Cat No. : AC201210000; AC201210010; AC201210500; AC201212500

CAS-No 7647-18-9
Synonyms Antimonic chloride; Antimony pentachloride

Recommended Use Laboratory chemicals.
Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet**Company**

Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone NumberFor information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887**2. Hazard(s) identification****Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|--------------|
| Acute oral toxicity | Category 4 |
| Skin Corrosion/irritation | Category 1 B |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system. | |

Label Elements**Signal Word**

Danger

Hazard Statements

Harmful if swallowed

Causes severe skin burns and eye damage

May cause respiratory irritation

**Precautionary Statements****Prevention**

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

Wash face, hands and any exposed skin thoroughly after handling

Response

Call a POISON CENTER or doctor/physician if you feel unwell

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Immediately call a POISON CENTER or doctor/physician

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Toxic to aquatic life with long lasting effects

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|------------------------|-----------|----------|
| Antimony pentachloride | 7647-18-9 | >95 |

4. First-aid measures**Eye Contact**

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Immediate medical attention is required. Wash off immediately with plenty of water for at least 15 minutes.

Inhalation

Move to fresh air. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If not breathing, give artificial respiration.

Ingestion

Do not induce vomiting. Obtain medical attention.

| | |
|--|---|
| Most important symptoms and effects | Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO₂). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media Water

Flash Point No information available
Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Contact with water liberates toxic gas. Water reactive.

Hazardous Combustion Products

Hydrogen chloride gas Fumes antimony oxide antimony

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health
3

Flammability
0

Instability
2

Physical hazards
W

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Environmental Precautions Do not flush into surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to contaminate ground water system.

Methods for Containment and Clean Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Ensure adequate ventilation. Wear personal protective equipment. Do not allow contact with water. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid ingestion and inhalation.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Store contents under argon. Corrosives area. Keep away from water. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|------------------------|----------------------------|--------------------------------------|--|----------------------------|
| Antimony pentachloride | TWA: 0.5 mg/m ³ | (Vacated) TWA: 0.5 mg/m ³ | IDLH: 50 mg/m ³ TWA: 0.5 mg/m ³ | TWA: 0.5 mg/m ³ |

Legend**ACGIH** - American Conference of Governmental Industrial Hygienists**OSHA** - Occupational Safety and Health Administration**NIOSH IDLH**: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|--|----------------------------|
| Physical State | Liquid |
| Appearance | Yellow |
| Odor | pungent |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | 2.8 °C / 37 °F |
| Boiling Point/Range | 92 °C / 197.6 °F @ 30 mmHg |
| Flash Point | No information available |
| Evaporation Rate | No information available |
| Flammability (solid,gas) | Not applicable |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | 1.1 mbar @ 20 °C |
| Vapor Density | 10.0 |
| Specific Gravity | 2.360 |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | 77 °C |
| Viscosity | No information available |
| Molecular Formula | Cl ₅ Sb |
| Molecular Weight | 299.01 |

10. Stability and reactivity**Reactive Hazard**

Yes

Stability

Reacts violently with water. May react with metals and lead to the formation of flammable hydrogen gas. Stable under normal conditions. Moisture sensitive.

| | |
|---|--|
| Conditions to Avoid | Incompatible products. Exposure to moist air or water. Heat. |
| Incompatible Materials | Bases, Strong oxidizing agents, Alcohols, Metals |
| Hazardous Decomposition Products | Hydrogen chloride gas, Fumes, antimony oxide, antimony |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------------------|---------------------------|-------------|---------------------------------|
| Antimony pentachloride | LD50 = 1115 mg/kg (Rat) | Not listed | 720 mg/m ³ /2h (Rat) |

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|------------------------|-----------|------------|------------|------------|------------|------------|
| Antimony pentachloride | 7647-18-9 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. Reacts with water so no ecotoxicity data for the substance is available. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability based on information available. May persist

Bioaccumulation/ Accumulation No information available.

Mobility Is not likely mobile in the environment.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN1730
 Proper Shipping Name ANTIMONY PENTACHLORIDE, LIQUID
 Proper technical name (Antimony (V)-chloride, 1M Sol in Methylene chloride)
 Hazard Class 8
 Packing Group II

TDG

UN-No UN1730
 Proper Shipping Name ANTIMONY PENTACHLORIDE, LIQUID
 Hazard Class 8
 Packing Group II

IATA

UN-No UN1730
 Proper Shipping Name ANTIMONY PENTACHLORIDE, LIQUID
 Hazard Class 8
 Packing Group II

IMDG/IMO

UN-No UN1730
 Proper Shipping Name ANTIMONY PENTACHLORIDE, LIQUID
 Hazard Class 8
 Packing Group II

15. Regulatory information

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|------------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Antimony pentachloride | X | X | - | 231-601-8 | - | | X | X | X | X | X |

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

| Component | CAS-No | Weight % | SARA 313 - Threshold |
|-----------|--------|----------|----------------------|
|-----------|--------|----------|----------------------|

| | | | Values % |
|------------------------|-----------|-----|----------|
| Antimony pentachloride | 7647-18-9 | >95 | 1.0 |

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|------------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Antimony pentachloride | X | 1000 lb | X | - |

Clean Air Act

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|------------------------|-----------|-------------------------|-------------------------|
| Antimony pentachloride | X | | - |

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|------------------------|--------------------------|----------------|
| Antimony pentachloride | 1000 lb | - |

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------------|---------------|------------|--------------|----------|--------------|
| Antimony pentachloride | X | X | X | X | X |

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Regulatory Affairs
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Creation Date 24-Nov-2010
Revision Date 19-Jan-2018
Print Date 19-Jan-2018

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text

End of SDS