

Material Safety Data Sheet

Antimony(III) chloride

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifier	Antimony(III) chloride; Antimony trichloride
2. Recommended Use & Uses advised against	Uses for Laboratory and R&D only
3. Information of Supplier	SAMCHUN PURE CHEMICAL CO.,LTD ADDRESS; (Mogok-dong) 117, Sandan-ro 16Beon-gil, Pyeongtaek-si, Gyeonggi-do, Korea Emergency Phone; 82-31-668-0700/3 Department; Safety & Environment dep. Web site; http://www.samchun.com

Section 2 – HAZARDS and DANGER IDENTIFICATION

1.GHS Classification· Identification	Metal corrosive material	Category1
	Acute toxic(Oral)	Category4
	Skin Corrosion/Skin Irritation	Category2
	Serious Eye Damage/Eye Irritation	Category2
	Carcinogenicity	Category2

2. Label and Mark including Precautionary Statement

◦Label elements



◦Signal word

Warning

◦Hazard · Danger statement

H290 May be corrosive to metals
H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H351 Suspected of causing cancer

◦Precautionary statement

Precaution P234 Keep only in original container
P264 Wash ... thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood.

Measures

P390 Absorb spillage to prevent material damage.
P330 Rinse mouth.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P321 Specific treatment (see Section 4. on this label).
P302+P352 IF ON SKIN: Wash with plenty of water
P332+P313 If skin irritation occurs: Get medical advice/attention.

- Measures** P362+P364 Take off contaminated clothing and wash before reuse
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 If eye irritation persists: Get medical advice/attention.
P308+P313 IF exposed: Call a POISON CENTER or doctor/physician
- Storage** P406 Store in corrosive resistant/... container with a resistant inner liner
P405 Store locked up
- Dispose** P501 Dispose of contents/container under related law and regulations

3. Other Hazard-Risk which are not included in the classification criteria

NFPA index(0~4steps) : Health=3, Fire=0, Reaction=1

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content (%)
Antimony(III) chloride	Antimony trichloride Antimonous chloride	10025-91-9	100

Section 4 – FIRST AID MEASURES

- 1. Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15minutes, Immediate medical attention is required.
- 2. Skin Contact** Take off contaminated cloths and shoes immediately, wash with plenty Of water and soap for at least 15minutes.
- 3. Inhalation** Move to fresh air immediately, if breathing is difficult, induce artificial respiration and immediate medical treatment is required.
- 4. Ingestion** Do not induce vomiting and Call a physician immediately.
- 5. Immediate medical attention and Notes for physician** Let physician aware material and take protection measures.

Section 5 – FIRE-FIGHT MEASURES

- 1. Suitable extinguish media** Powder, carbon dioxide, water spray, foam extinguisher
Unsuitable Extinguishing Media: Non-described
- 2. Special hazards arising from the substance** Thermal decomposition products: chlorine, antimony oxide
- 3. Special protective equipment and Precautions for fire-fighters** Move a container away from fire place, available not being dangerous
Cool the container with water spray for long time, after extinguishing
No direct contact with material by water. In case of big fire, mass watering in fine spray and decrease vapor. Spray in safety distance, avoid inhaling of material-itself and burnings, position in opposite wind and escape low area.

Section 6 – ACCIDENTIAL RELEASE MEASURES

- 1. Personal precautions and Emergency procedures** Don't touch leakages and avoid inhale and skin contact, ventilate and use air respiratory in closed room, remove ignition source.
- 2. Environmental precautions** Minimize leak/spill, collect and keep leak/spill in container
- 3. Methods and material for containment and cleaning up** Remove residue with high-efficient cleaner

Section 7 – HANDING AND STORAGE

- 1. Precautions for safe Handling** Skin contact, inhalation of vapors and prevent intrusion to the eye, all containers will be grounded.
- 2. Conditions for safe storage** Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible materials. Avoid contact with light.

Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

1. Occupational exposure limit, biological exposure limit

National law of Safety management of

Industrial Safety and Health Act

TWA: 0.5mg / m³ antimony and its compounds

2. **Appropriate** Check conditions of exposure criteria, operation local ventilation during work

Engineering controls

3. Personal protective equipment

◦ **Respiratory protection** Because it is concerned about the harmfulness of human body due to chemical substances, it is recommended to wear respiratory protective equipment with dust mask or dust filter in consideration of physical and chemical characteristics during handling.

Respiratory protection should be certified by the Health and Safety Authority.

If this affects the life or health concerns or other unknown concentrations, depending on the work environment should wear supplied-air respirator, air respirator

◦ **Eye-protection** Wear safety goggles for handling chemicals as they may cause human health hazards due to chemicals.

Install eye wash facilities and emergency eyewash stations near chemical handling sites.

◦ **Hand protection** Wear safety gloves for handling chemicals as they may cause human health hazards.

◦ **Skin and body protection** Wear chemical protective clothing when handling, as it is likely to harm human health due to chemicals

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

1. Physical state and color	Solid(Colorless or White)	2. Odor	Irritating odor
3. threshold	N/A	4. pH	N/A
5. Melting/Freezing point	73°C	6. Boiling point/range	223°C
7. Flashing point	N/A	8. Evaporation speed	N/A
9. Flammability(solid,gas)	N/A	10. Flash or Explosion limit upper / lower	N/A
11. Vapor pressure	133Pa(49°C)	12. Solubility	1(25°C, g/10.1ml)
13. Vapor density	7.9	14. Gravity	3.14
15. n-octanol-water Partition coefficient	N/A	16. Self ignition temp(°C)	N/A
17. Cracking temp(°C)	45.19(kJ/mol)	18. Viscosity	1.66
19. Molecular Weight	228.11		

Section 10 – STABILITY AND REACTIVITY

1. **Chemical stability and Possibility of Hazardous Reactions** Stable under normal temp. and pressure
May explode if heated

Reactions

2. **Conditions to Avoid** Avoid heat, sparks, flames and other sources of ignition.

3. **Incompatible Materials** Metals, alkali metals, strong oxidizing agents, strong acids, potassium, sodium

4. **Hazardous Decomposition Products** Thermal decomposition products: chlorine, antimony oxide

Section 11 – TOXICOLOGICAL INFORMATION

1. Information on the likely routes of exposure.

N/A

2. Health hazard information

◦ Acute toxic

Oral : LD50 525mg/kg Rat

Skin : N/A

Inhalation : N/A

◦Serious skin corrosive / irritation	Causes skin irritation
◦Serious eye damage / irritation	Causes eye irritation
◦Respiratory sensitization	N/A
◦Skin sensitization	N/A
◦ Carcinogenicity	IARC : 2B
◦ Germ cell Mutagenicity	In vitro mammalian chromosome abnormality test results Positive with or without metabolic activity Micronucleus test results using mammalian erythrocytes in vivo No statistically significant increase was observed in acute or repeated dose trials
◦ Reproductive toxic	N/A
◦Specific target organ toxicity (single exposure)	N/A
◦Specific target organ toxicity (repeated exposure)	N/A
◦Aspiration hazard	N/A

Section 12 – ECOLOGICAL INFORMATION

1.Acquatic and Terrestrial eco toxicity	Fish toxicity : N/A Invertebrate toxicity : N/A Sea algae : N/A
2.Persistence and degradability	Persistence : N/A Degradability : N/A
3.Bioaccumulative potential	Concentrations : N/A Bioaccumulative : N/A
4.Mobility in soil	N/A
5.Other adverse effects	N/A

Section 13 – Disposable considerations

1.Waste methods	Dispose in accordance with local regulations.
2.Waste warning	Isolate waste away from prohibitive mixture substance.

Section 14 – TRANSPORT INFORMATION

1. UN No.	1733
2.Proper shipping Name	Antimony(III) chloride
3.Hazard class	8
4.Packing group	II
5.Marine pollutant	N/A
6.Particular safety Measures for transportation	Fire emergency : F-A Emergency measures RELEASE : S-B

Section 15 – REGULATORY INFORMATION

1.Occupation safety and health acts	Test material of working environment (Test period; 6months) Hazardous material of administration objective Special diagnosis material of health (Diagnosis period; 12months) Standard material of exposure
2. Chemical Substances Control Act	Toxic
3. National law of Safety management of hazardous material	Non-described

4.National law of management of Wastes

Designated Waste, Toxic Waste

5.Other domestic and foreign law

US Management Information (CERCLA Regulation): 453.599kg (1000lb)

EU Classification Information (Fixed Classification Result): Skin Corr. 1B Aquatic Chronic 2

EU Classification Information (Hazard Statements): H314 H411

Section 16 – OTHER INFORMATION

1. Material source

A chemical information MSDS Safety and Health Agency

National Institute of Environmental Research Chemical Information Systems

Korea Industrial Technology National Fire Hazardous Materials Information System

1. The 1st edition

2002.07.30

2. Revision and

6 / 2023.10.19

The final revision

. Other references

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