

SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-CE-00883
Product Name	Antimony
CAS No.	7440-36-0
Category	Inorganics
Synonyms	Stibium
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

- Skin irritation (Category 2)
- Serious eye damage/eye irritation (Category 2)
- Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H301	Not available
H302	Harmful if swallowed.

H332	Harmful if inhaled.
H351	Not available
H373	Not available
H411	Toxic to aquatic life with long lasting effects.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	Not available
H370	Not available
H372	Not available
H401	Not available

Precautionary Statement(s)

Code	Statement
P203	Not available
P260	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P316	Not available
P301+P317	Not available
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P317	Not available
P318	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see ... on this label).
P330	Not available
P391	Not available

P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation
P264+P265	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
P308+P316	Not available
P332+P317	If skin irritation occurs: Get medical help.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Antimony
 CAS Number : 7440-36-0
 Molecular Formula : Sb
 Molecular Weight : 121.76
 Parent Chemical : .
 Synonyms : Stibium
 Concentration : Not available

SECTION 4: First aid measures

Not available

SECTION 5: Firefighting measures

Not available

SECTION 6: Accidental release measures

Not available

SECTION-7: Handling and storage

Not available

SECTION 8: Exposure controls / personal protection

Not available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

Not available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: Inhalation of dust containing antimony by factory workers induced gastrointestinal irritation, probably result of antimony dust transported via the mucociliary escalator and swallowed. Acute symptoms, including abdominal cramps, diarrhea, and vomiting among smelter workers subjected to heavy exposure to antimony fumes were reported. Workers chronically exposed to airborne antimony can develop persistent symptoms such as dermatitis, eye irritation, obstructive lung alterations, and emphysema with increased pneumoconiosis. Skin effects from chronic antimony exposures have been reported. Pruritic skin papules progressing to skin eruptions, referred as "antimony spots", are occasionally seen in workers chronically exposed to antimony. Women working in an antimony metallurgical plant were compared to a similar group of women not exposed to antimony. The exposed group had higher incidences of spontaneous abortions (12.5 vs 4.1%), premature births (3.4 vs 1.2%), and gynecological problems (77.5 vs 56%). Rats given a diet containing 0.5-2% antimony had decreased weight gain, and had elevated serum levels of a liver enzyme, aspartate aminotransferase. Abortions were frequent in rabbits fed doses of metallic antimony of 5 to 55 mg every other day for 30, 60, and 90 days. Antimony was mutagenic in bacteria or phage. It was shown to induce chromosomal aberrations or abnormal cell divisions in animal or plant cells. The inhalation data suggests that the myocardium is a target of antimony toxicity. It is possible that antimony affects circulating glucose by interfering with enzymes of the glycogenolysis and gluconeogenesis pathways. The mechanism of action of antimony remains unclear. However, some studies suggest that antimony combines with sulfhydryl groups including those in several enzymes important for tissue respiration. The antidotal action of BAL (2,3-dimercaptopropanol) depends on its ability to prevent or break the union between antimony and vital enzymes. Moreover, the cause of death is believed to be essentially the same as that in acute arsenic poisoning.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: Workers chronically exposed to airborne antimony and antimony compounds can develop persistent symptoms such as eye irritation.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: Antimony was mutagenic in bacteria or phage. It was shown to induce chromosomal aberrations or abnormal cell divisions in animal or plant cells.
- Carcinogenicity: Inadequate information to assess carcinogenic potential. Three groups of 8 month old Wistar derived rats (90 males and 90 females per group) were exposed by inhalation to either antimony trioxide (time-weighted average (TWA) 45 mg/cu m), antimony ore concentrate (TWA 36 + 40 mg/cu m), or filtered air (controls) for 7 hr/day, 5 day/wk, for up to 52 wk and sacrificed 20 wk after terminating exposures. The most significant findings were the presence of lung neoplasms in 27% of females exposed to antimony trioxide and 25% of females exposed to Sb ore concentrate. None of the male rats in any group or the female controls developed lung neoplasms. There were no significant differences in incidence of cancer of other organs between exposed and control rats.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: Workers chronically exposed to airborne antimony can develop persistent symptoms such as dermatitis, eye irritation, obstructive lung alterations, and emphysema with increased pneumoconiosis. Skin effects from chronic antimony exposures have been reported. Pruritic skin papules progressing to skin eruptions, referred as "antimony spots", are occasionally seen in workers chronically exposed to antimony. Rats given a diet

containing 0.5-2% antimony had decreased weight gain, and had elevated serum levels of a liver enzyme, aspartate aminotransferase.

- Aspiration hazard: No data available.

Likely routes of exposure

- Inhalation of dust containing antimony; exposure to antimony fumes.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye irritation.

SECTION 12: Ecological information

Not available

SECTION 13: Disposal considerations

Not available

SECTION 14: Transport information

Not available

SECTION 15: Regulatory information

Not available

SECTION 16: Other information

Not available

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