Antimony Trioxide
CAS No 1309-64-4

MATERIAL SAFETY DATA SHEET
SDS/MSDS

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

1.1 Product identifiers
Product name : Antimony Trioxide
CAS-No. : 1309-64-4

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet
Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi-10002
INDIA

Telephone : +91 11 49404040
Email : care@cdhfinechemical.com

1.4 Emergency telephone number
Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Carcinogenicity (Category 2), H351

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram

Signal word Warning
Hazard statement(s) Suspected of causing cancer.
H351
Precautionary statement(s) Use personal protective equipment as required.
P281
Supplemental Hazard Statements none
2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : $\text{O}_3\text{Sb}_2$
Molecular weight : 291.52 g/mol
CAS-No. : 1309-64-4
EC-No. : 215-175-0
Index-No. : 051-005-00-X

Hazardous ingredients according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimony trioxide</td>
<td>Carc. 2; H351</td>
<td>&lt;= 100 %</td>
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<tr>
<td>CAS-No.</td>
<td>1309-64-4</td>
<td></td>
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<td>EC-No.</td>
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</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Antimony oxide

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance
   Form: powder

b) Odour
   No data available

c) Odour Threshold
   No data available

d) pH
   No data available

e) Melting point/freezing point
   Melting point/range: 655 °C - lit.

f) Initial boiling point and boiling range
   1,550 °C - lit.

g) Flash point
   No data available

h) Evaporation rate
   No data available

i) Flammability (solid, gas)
   No data available

j) Upper/lower flammability or explosive limits
   No data available

k) Vapour pressure
   No data available

l) Vapour density
   No data available

m) Relative density
   ca.5.2 g/cm3 at 20 °C

n) Water solubility
   0.0287 g/l at 20 °C

o) Partition coefficient: n-octanol/water
   No data available

p) Auto-ignition temperature
   No data available

q) Decomposition temperature
   No data available

r) Viscosity
   No data available

s) Explosive properties
   No data available

t) Oxidizing properties
   No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong reducing agents, Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.

- Antimony oxide

Other decomposition products - No data available

In the event of fire: see section 5
SECTION 11: Toxicological information

11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - > 34,600 mg/kg (Antimony trioxide)

**Skin corrosion/irritation**
No data available (Antimony trioxide)

**Serious eye damage/eye irritation**
Eyes - Rabbit (Antimony trioxide)
Result: Mild eye irritation (Draize Test)

**Respiratory or skin sensitisation**
Maximisation Test - Guinea pig (Antimony trioxide)
Result: Does not cause skin sensitisation. (OECD Test Guideline 406)

**Germ cell mutagenicity**
No data available (Antimony trioxide)

**Carcinogenicity**
Limited evidence of carcinogenicity in animal studies (Antimony trioxide)
IARC: 2B - Group 2B: Possibly carcinogenic to humans (Antimony trioxide)

**Reproductive toxicity**

**Specific target organ toxicity - single exposure**
No data available (Antimony trioxide)

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available (Antimony trioxide)

**Additional Information**
RTECS: CC5650000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Antimony trioxide)

SECTION 12: Ecological information

12.1 **Toxicity**

**Toxicity to fish**
Mortality LC50 - Danio rerio (zebra fish) - > 1,000 mg/l - 96 h (Antimony trioxide)
(OECD Test Guideline 203)

**Toxicity to daphnia and other aquatic invertebrates**
Immobilization EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 48 h (Antimony trioxide)
(OECD Test Guideline 202)

**Toxicity to algae**
Growth inhibition EC50 - Selenastrum capricornutum (green algae) - 67 mg/l - 72 h (Antimony trioxide)
(OECD Test Guideline 201)

12.2 **Persistence and degradability**
No data available

12.3 **Bioaccumulative potential**
No data available
12.4 Mobility in soil  
No data available (Antimony trioxide)  

12.5 Results of PBT and vPvB assessment  
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.  

12.6 Other adverse effects  
Harmful to aquatic life with long lasting effects.  
No data available  

SECTION 13: Disposal considerations  

13.1 Waste treatment methods  
Product  
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.  
Contaminated packaging  
Dispose of as unused product.  

SECTION 14: Transport information  

14.1 UN number  
ADR/RID: -  
IMDG: -  
IATA: -  

14.2 UN proper shipping name  
ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods  

14.3 Transport hazard class(es)  
ADR/RID: -  
IMDG: -  
IATA: -  

14.4 Packaging group  
ADR/RID: -  
IMDG: -  
IATA: -  

14.5 Environmental hazards  
ADR/RID: no  
IMDG Marine pollutant: no  
IATA: no  

14.6 Special precautions for user  
No data available  

SECTION 15: Regulatory information  

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.  

15.2 Chemical safety assessment  
For this product a chemical safety assessment was not carried out  

SECTION 16: Other information  

Full text of H-Statements referred to under sections 2 and 3.  
H351 Suspected of causing cancer.  

Further information  
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.