



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Antimony Metal

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1. Product and Company Identification

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Trade Name: Antimony  
Chemical Formula: Sb  
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.  
Street: 37 Ramland Road  
City: Orangeburg  
State: New York  
Zip Code: 10962  
Country: USA  
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)  
+1-703-527-3887 (International)

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2. Hazards Identification

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Signal Word: Danger



Hazard Statements: H301 Toxic if swallowed  
H332 Harmful if inhaled

Precautionary Statements: P261 Avoid breathing dust/fume/vapor  
P264 Wash thoroughly after handling  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P321 Specific treatment (see on this label)  
P405 Store locked up  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):  
Health: Powder 2 Bulk 1  
Flammability: 0 0  
Physical: 1 0

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### 3. Composition

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Chemical Family: Metalloid  
Additional Names: Stibium

Antimony (Sb):  
Percentage: 100 wt%  
CAS #: 7440-36-0  
EC #: 231-146-5

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### 4. First Aid Procedures

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General Treatment: Remove any contaminated clothing.  
Supply oxygen if breathing is difficult.  
Seek medical attention if symptoms persist.

Special Treatment: None  
Important Symptoms: None

Inhalation: Remove victim to fresh air.  
Ingestion: Do not induce vomiting. Seek immediate medical attention  
Skin: Wash affected area with mild soap and water.  
Eyes: Flush eyes with water, blinking often for several minutes.

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### 5. Firefighting Measures

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Flammability: Non-flammable  
Extinguishing Media: Do not use water for metal fires – use extinguishing powder.  
Spec. Fire Fighting Procedure: Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

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### 6. Accidental Release Measures

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If Material Is Released/Spilled: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

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### 7. Handling and Storage

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Handling Conditions: Wash thoroughly after handling.  
Storage Conditions: Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

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## 8. Exposure Controls and Personal Protection

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|-------------------------------------|---|
| Permissible Exposure Limits:        | 0.5 mg/m <sup>3</sup> as Sb, long-term value  |
| Threshold Limit Value:              | 0.5 mg/m <sup>3</sup> as Sb, long-term value  |
| Special Equipment:                  | None  |
| Respiratory Protection:             | Use a respirator with type P100 (USA) or P3 (EN143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. |
| Protective Gloves:                  | Nitrile rubber gloves, NBR 0.11mm thick.  |
| Penetration time of glove material: | 480 minutes   |
| Eye Protection:                     | Safety glasses or goggles   |
| Body Protection:                    | Protective work clothing. Wear close-toed shoes and long sleeves/pants.   |

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## 9. Physical and Chemical Characteristics

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|                           |  |
|---------------------------|--|
| Color                     | Silver grey / Grey   |
| Form:                     | Powder, Granules, Pellets, Sputtering target, Custom parts |
| Odor:                     | Odorless   |
| Water Solubility:         | Insoluble  |
| Boiling Point:            | 1635 °C  |
| Melting Point:            | 630 °C   |
| Flash Point:              | N/A  |
| Autoignition Temperature: | N/A  |
| Density:                  | 6.684 g/cc   |
| Molecular weight:         | 121.76 g/mol   |

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## 10. Reactivity

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|                                   |   |
|-----------------------------------|---|
| Stability:                        | Stable under recommended storage conditions |
| Reacts With:                      | Oxidizing agents, Acids                     |
| Incompatible Conditions:          | None  |
| Hazardous Decomposition Products: | Antimony oxides                             |

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## 11. Toxicological Information

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|                                |                            |
|--------------------------------|----------------------------|
| Potential Health Effects:      |                            |
| Eyes:                          | May cause irritation       |
| Skin:                          | May cause irritation       |
| Ingestion:                     | Toxic                      |
| Inhalation:                    | Harmful                    |
| Chronic:                       | N/A                        |
| Signs & Symptoms:              | N/A                        |
| Aggravated Medical Conditions: | N/A                        |
| Median Lethal Dose:            | 100 mg/kg for rat by mouth |
| Carcinogen:                    | N/A                        |

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## 12. Ecological Information

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|  |                       |
|--|-----------------------|
| Aquatic Toxicity:                      | High                  |
| Persistent Bioaccumulation Toxicity:   | No                    |
| Very Persistent, Very Bioaccumulative: | No                    |
| Notes:                                 | Toxic to aquatic life |

May cause long lasting harmful effects to aquatic life

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### 13. Disposal Considerations

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Dispose of in accordance with local, state, national, and international regulations.

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### 14. Transportation Data

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Hazardous: Hazardous as powder only.



Hazard Class: 6.1 Toxic substances  
Packing Group: III  
UN Number: UN2871  
Proper Shipping Name: Antimony powder

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### 15. Regulatory Information

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Sec 302 Extremely Hazardous: No  
Sec 304 Reportable Quantities: N/A  
Sec 313 Toxic Chemicals: Yes

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### 16. Other Information

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This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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