



MATERIAL SAFETY DATA SHEET  
COMPLIES WITH 29 CFR 1910.1200.  
OSHA HAZARD COMMUNICATION RULE

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## CHEMICAL IDENTITY

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LABEL IDENTITY	<b>ANTIMONY</b>
CHEMICAL NAME/SYNONYMS	<b>ANTIMONY</b>
FORMULA	<b>Sb</b>
CHEMICAL FAMILY	<b>METAL</b>
CAS REGISTRY NUMBER	<b>7440-36-0</b>
HAZARDOUS INGREDIENTS	<b>ANTIMONY</b>
% <b>100</b>	TLV: <b>0.5mg/m3</b> OSHA PEL: <b>500mg/m3</b>

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## PHYSICAL AND CHEMICAL PROPERTIES

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COLOR, FORM AND ODOR	<b>Silver/gray lustrous metal. Odorless.</b>
BOILING POINT (C°)	<b>1635 also reported 1440</b>
DENSITY (gm/cc)	<b>6.684 at 25</b>
VAPOR PRESSURE @ 20°	<b>1mm @ 886</b>
% VOLATILE BY VOLUME (%)	<b>NA</b>
REACTION WITH WATER	<b>NA</b>
EVAPORATION RATE (H2O=1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Insoluble</b>
MELTING POINT (C°)	<b>630</b>
OTHER	<b>ND</b>

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## FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT	<b>NA</b>
AUTOIGNITION TEMPERATURE (°C)	<b>ND</b>
FLAMMABILITY	<b>Flammability hazard as a fine powder</b>
EXTINGUISHING MEDIA	<b>Do not use water on metal fires, use dry-chemical, CO2, sand graphite.</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>Wear self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>Material may emit toxic fumes if involved in a fire. Moderate flammability hazard in the forms of dust and vapor, when exposed to heat or flame. Moderate explosion hazard in form of dust when exposed to flame. Emits toxic fumes of SbH3 acids.</b>



## ANTIMONY MATERIAL SAFETY DATA SHEET

### HEALTH HAZARD INFORMATION

TOXICITY DATA: unk-man LDLO **15mg/kg** orl-rat LDSO: **7mg/kg**  
ipr-rat LDLO: **100mg/kg** ipr-mus LDSO: **90mg/kg**  
ipr-gpg LDLO: **150mg/kg**

#### HMIS HAZARD RATING

HEALTH	<b>3</b>	FLAMMABILITY	<b>2</b>
REACTIVITY	<b>1</b>	PERSONAL PROTECTION	<b>J</b>

ROUTES OF ENTRY: INHALATION: **Yes**      INGESTION: **Yes**      SKIN: **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Previous disorders of the skin, eyes and respiratory system.**

#### EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **Respiratory irritant. Irritation, sneezing, chest pain, difficulty breathing, salivation, ulceration of respiratory membranes, headache, fatigue bronchitis, nausea, pulmonary fibrosis and pulmonary edema possible.**

DERMAL/EYE CONTACT: **Antimony and its compounds have been reported to cause dermatitis, keratitis, conjunctivitis and nasal septal ulceration by contact, fumes or dust. Irritating to the skin and mucous membranes. Irritation of skin, inflamed membranes of the nose and throat.**

OTHER (specify): **Avoid conditions where nascent hydrogen will react with antimony to form SbH3 which is extremely toxic (nausea, vomiting, headache, abdominal pain, death) may cause metallic taste and stomach ache, gastrointestinal upset, with vomiting and diarrhea, irritability, sleeplessness, dizziness and muscular/neuralgic pains. Compounds are highly toxic via oral and inter-peritoneum routes.**

CARCINOGENICITY: **None**    NTP: **No**    IARC MONOGRAPHS: **No**    OSHA REGULATE: **No**

#### EMERGENCY FIRST AID PROCEDURES:

INGESTION: **Give 2 glasses of Milk or water and induce vomiting.**

INHALATION: **Remove victim to fresh air, administer oxygen.**

SKIN CONTACT: **Brush material off skin. Wash affected area with soap and water.**

EYE CONTACT: **Flush eyes with lukewarm water for 15 minutes**

**SEEK MEDICAL ATTENTION FOR ALL SITUATIONS MENTIONED ABOVE**

### REACTIVITY DATA

STABILITY	<b>Unstable</b>
CONDITIONS CONTRIBUTING	<b>Heat and flame</b>
INCOMPATIBILITY (MATERIALS TO AVOID)	<b>H2SO4, H2, alkali nitrates, aluminum, halogens, oxidants and disulfur dibromide.</b>
HAZARDOUS DECOMPOSITION PRODUCTS	<b>SbH3, Sb2O3</b>
HAZARDOUD POLYMERZATION	<b>Will Not Occur</b>
CONDITIONS TO AVOID	<b>Heat, flame and incompatibility materials</b>

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## ANTIMONY MATERIAL SAFETY DATA SHEET

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### SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

**Wear a self-contained breathing apparatus and full protective clothing. Isolate area where the spill occurred and ensure that proper ventilation is available. Vacuum up the spill using a high efficiency unit and place in a container for proper disposal. Take care not to raise dust.**

WASTE DISPOSAL METHOD: **In accordance with applicable Local, State and Federal regulations.**

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### SPECIAL PROTECTIVE INFORMATION

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RESPIRATORY PROTECTION (specify)	<b>Wear NIOSH-approved dust-mist-fume cartridge respirator</b>
LOCAL EXHAUST	<b>Maintain exposure below TLV</b>
MECHANICAL (general)	<b>Not Recommended</b>
SPECIAL	<b>Handle in a controlled atmosphere</b>
OTHER PROTECTIVE EQUIPMENT	<b>Wear protective clothing to prevent contamination of skin and clothes.</b>
PROTECTIVE GLOVES	<b>Neoprene</b>
EYE PROTECTION	<b>Safety glasses</b>

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### SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

**Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly after handling and before eating.**

TRANSPORTATION REQUIREMENTS

DOT CLASS:	<b>Not classified</b>
UN NUMBER:	<b>1549</b>
IMCO CLASS:	<b>6.1</b>
OTHER:	<b>ND</b>

PRECAUTIONARY LABELING **NONE**

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**NA= NOT APPLICABLE**

**ND= NO DATA FOUND**