



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

Revised: 6/6/01

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## CHEMICAL IDENTITY

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LABEL IDENTITY  
CHEMICAL NAME/SYNONYMS

**ANTIMONY OXIDE**  
**ANTIMONY OXIDE, ANTIMONY TRIOXIDE,**  
**FLOWERS OF ANTIMONY, SENARMONTITE,**  
**VALENTINITE, EXITELITE,**  
**WEISSPIESSGLANZ, ANTIMONY WHITE,**  
**ANTIMONIOUS OXIDE, ANTIMONY PEROXIDE,**  
**ANTIMONY SESQUIOXIDE**

FORMULA  
CHEMICAL FAMILY  
CAS REGISTRY NUMBER  
HAZARDOUS INGREDIENTS

**Sb<sub>2</sub>O<sub>3</sub>**  
**METAL OXIDE**  
**1309-64-4**  
**ANTIMONY OXIDE**

% **100**

TLV: **0.5mg/m<sup>3</sup>**

OSHA PEL: **0.5mg/m<sup>3</sup>**

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## PHYSICAL AND CHEMICAL PROPERTIES

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COLOR, FORM AND ODOR  
BOILING POINT (C°)  
DENSITY (gm/cc)  
VAPOR PRESSURE (vs. air or mm hg)  
EVAPORATION RATE (H<sub>2</sub>O=1)  
SOLUBILITY IN WATER  
MELTING POINT (C°)  
OTHER

**White crystalline powder and pieces; no odor**  
**1425.00 C to 1550.00 C**  
**ND**  
**1 at 574.0 C**  
**ND**  
**Insoluble**  
**656.00 C**  
**ND**

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## FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT  
FLAMMABILITY  
EXTINGUISHING MEDIA

**NA**  
**Non-Flammable**  
**Not applicable. Use suitable extinguishing agent for surrounding materials and type of fire.**

SPECIAL FIRE FIGHTING PROCEDURES

**Wear self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.**

UNUSUAL FIRE & EXPLOSION HAZARDS

**Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous Isolate runoff to prevent environmental pollution.**



## ANTIMONY OXIDE MATERIAL SAFETY DATA SHEET

### HEALTH HAZARD INFORMATION

TOXICITY DATA:	mrc-bcs 50 mmol/L	ipr-rat LD50: 3250 mg/kg
	ipr-mus LD50: 172 mg/kg	ihl-rat TCLO: 270 us/m <sup>3</sup>
	ihl-rat TCLO: 4200 ug/m <sup>3</sup> /52W-I: CAR.	ivn-dog LDLO: 3 mg/kg
	ihl-rat TC: 4 mg/m <sup>3</sup> /1Y-I:ETA	scu-rbt LDLO: 2500 ug/kg
	ihl-rat TD: 1600 ug/m <sup>3</sup> /52W-I: NEO	ihl-rat TC: 50 mg/m <sup>3</sup> /7H/52W

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

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Pre-existing respiratory disorders.**

EFFECTS OF EXPOSURE (acute and chronic):

INHALATION: **May cause a red, dry, throat, coughing, dizziness, headache, chest pain, shortness of breath, weight loss, nausea, vomiting, diarrhea, cramps, insomnia and anorexia.**

EYE CONTACT: **May cause red, itching, inflammation, burning sensation and watering.**

INGESTION: **May cause salivation, cough, metallic taste, nausea, vomiting, bloody diarrhea, dizziness, muscular pain, sleeplessness and irritability.**

SKIN: **May cause redness, itching and burning sensation.**

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

EMERGENCY FIRST AID PROCEDURES:

INGESTION: **Give 1-2 glasses of milk or water and induce vomiting; seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.**

INHALATION: **Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention.**

SKIN CONTACT: **Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention if symptoms persist.**

EYE CONTACT: **Flush eyes with lukewarm water, lifting upper and lower eyelids, for at last 15 minutes. Seek medical attention if symptoms persist.**

### REACTIVITY DATA

STABILITY

**Unstable**

INCOMPATIBILITY (MATERIALS TO AVOID)

**Acid, basis, reducing agents, BrF<sub>3</sub> and chlorinated rubber, heat, interhalogens, chlorine trifluoride, bromine pentafluoride, phosphorus pentachloride**

HAZARDOUS DECOMPOSITION PRODUCTS

**Fumes of antimony**

HAZARDOUS POLYMERIZATION

**Will Not Occur**

CONDITIONS TO AVOID

**No data available**



## ANTIMONY OXIDE 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 appropriate respiratory and protective equipment. 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 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)  
LOCAL EXHAUST

**NIOSH approved respirator  
Necessary to control any air contaminants to within their PELs or TLVs during the use of this product.**

MECHANICAL (general)  
SPECIAL  
OTHER PROTECTIVE EQUIPMENT

**Good general ventilation is recommended  
Handle in a controlled atmosphere  
Wear protective clothing to prevent contamination of skin and clothes.**

PROTECTIVE GLOVES  
EYE PROTECTION

**Neoprene  
Safety glasses**

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### SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

**No data available.**

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THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

**NA= NOT APPLICABLE**

**ND= NO DATA FOUND**