

ANTIMONY**0775**

October 1997

CAS No: 7440-36-0
 RTECS No: CC4025000
 UN No: 2871
 EC No:

Antimony black
 Antimony regulus
 Stibium
 Sb
 Atomic mass: 121.8

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Water spray, powder.
EXPLOSION	Finely dispersed particles form explosive mixtures in air. Risk of fire and explosion on contact with strong oxidants.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
Inhalation	Cough. Vomiting. (see Ingestion).	Local exhaust or breathing protection.	Fresh air, rest.
Skin	Dry skin.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Safety goggles, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Burning sensation. Diarrhoea. Vomiting. Death.	Do not eat, drink, or smoke during work.	Rinse mouth. Rest. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. (extra personal protection: P2 filter respirator for harmful particles).	Symbol R: S: UN Hazard Class: 6.1 UN Pack Group: III Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-61G11c	Separated from strong oxidants, acids, food and feedstuffs.

IMPORTANT DATA

Physical State; Appearance

SILVER-WHITE, LUSTROUS, HARD, BRITTLE METAL OR DARK GRAY POWDER.

Physical Dangers

Dust explosion possible if in powder or granular form, mixed with air.

Chemical Dangers

On combustion, forms toxic fumes (antimony oxides). Reacts violently with oxidants (e.g. halogens, alkali permanganates, nitrates), and powdered metals causing fire and explosion hazard. On contact with acids may emit toxic gas (stibine). See ICSC 0776.

Occupational Exposure Limits

TLV (as Sb): 0.5 mg/m³ (as TWA) (ACGIH 1997).
MAK as Sb: 0.5 mg/m³; (1996).

Routes of Exposure

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

Inhalation Risk

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of Short-term Exposure

Exposure by ingestion could cause gastrointestinal irritation. Exposure far above the OEL may result in death.

Effects of Long-term or Repeated Exposure

Repeated or prolonged contact with skin may cause dermatitis, especially when exposed to fumes. The substance may have effects on the eye, respiratory tract and lungs, resulting in pneumoconiosis.

PHYSICAL PROPERTIES

Boiling point: 1635°C
Melting point: 630°C
Relative density (water = 1): 6.7

Solubility in water: none
Vapour pressure, Pa at 886°C: 133

ENVIRONMENTAL DATA

NOTES

Other boiling points: 1325°C, 1440°C, 1750°C. Depending on the degree of exposure, periodic medical examination is indicated.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information