**ANTIMONY**

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

Antimony black  
Antimony regulus  
Stibium  
Sb  
Atomic mass: 121.8

<table>
<thead>
<tr>
<th>TYPES OF HAZARD/EXPOSURE</th>
<th>ACUTE HAZARDS/SYMPTOMS</th>
<th>PREVENTION</th>
<th>FIRST AID/FIRE FIGHTING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRE</strong></td>
<td>Gives off irritating or toxic fumes (or gases) in a fire.</td>
<td>NO open flames.</td>
<td>Water spray, powder.</td>
</tr>
<tr>
<td><strong>EXPLOSION</strong></td>
<td>Finely dispersed particles form explosive mixtures in air. Risk of fire and explosion on contact with strong oxidants.</td>
<td>Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.</td>
<td>In case of fire: keep drums, etc., cool by spraying with water.</td>
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<th>EXPOSURE</th>
<th>PREVENT DISPERSION OF DUST! STRICT HYGIENE!</th>
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<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td>Cough. Vomiting. (see Ingestion). Local exhaust or breathing protection. Fresh air, rest.</td>
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<tr>
<td><strong>Skin</strong></td>
<td>Dry skin. Protective gloves. Protective clothing. Remove contaminated clothes. Rinse and then wash skin with water and soap.</td>
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<tr>
<td><strong>Eyes</strong></td>
<td>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.</td>
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<tr>
<th>SPILLAGE DISPOSAL</th>
<th>PACKAGING &amp; LABELLING</th>
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<tr>
<td>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).</td>
<td>Symbol: R: S: UN Hazard Class: 6.1 UN Pack Group: III</td>
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<tr>
<th>EMERGENCY RESPONSE</th>
<th>STORAGE</th>
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<td>Transport Emergency Card: TEC (R)-61G11c</td>
<td>Separated from strong oxidants, acids, food and feedstuffs.</td>
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</table>
**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

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