

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.0 Revision Date 31.03.2016

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Antimony

Product Number : 452343

Brand : Aldrich

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 7440-36-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Chemical Pvt Limited
Industrial Area, Anekal Taluka
Plot No 12,
12 Bommasandra - Jigani Link Road
560100 BANGALORE
INDIA

1.4 Emergency telephone number

Emergency Phone # : +91 98802 05043

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : Sb

Molecular weight : 121.76 g/mol

CAS-No. : 7440-36-0

EC-No. : 231-146-5

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Antimony oxide

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industria situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|--------------------|------------------------------------|
| a) Appearance | Form: Beads
Colour: silverwhite |
| b) Odour | odourless |
| c) Odour Threshold | No data available |

d) pH	No data available
e) Melting point/freezing point	Melting point/range: 630 °C - lit.
f) Initial boiling point and boiling range	1,635 °C - lit.
g) Flash point	Not applicable
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	6.69 g/cm ³ at 25 °C
n) Water solubility	insoluble
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Oxidizing agents, Acids, Hydrogen gas, halogen acids, Reducing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Antimony oxide

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 7,000 mg/kg(Antimony)

Skin corrosion/irritation

No data available(Antimony)

Serious eye damage/eye irritation

No data available(Antimony)

Respiratory or skin sensitisation

No data available(Antimony)

Germ cell mutagenicity

No data available(Antimony)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available(Antimony)

Specific target organ toxicity - single exposure

No data available(Antimony)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(Antimony)

Additional Information

RTECS: Not available

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available(Antimony)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

Plasmaterials, Inc.
 2268 Research Drive
 Livermore, CA 94550
 Ph: (925) 447-4030 Fx: (925) 447-4031
 http://plasmaterials.com

MATERIAL SAFETY DATA SHEET

Section 1- PRODUCT IDENTIFICATION

COMPOSITION Sb	PRODUCT NAME Antimony
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Section 2- HAZARDOUS INGREDIENTS

Note: Products under normal conditions do not represent an inhalation, ingestion or contact health hazard.

MATERIAL OR COMPONENT	CAS NUMBER	WT%	EXPOSURE LIMITS	
			OSHA PEL (Mg/M3)	ACGIH TLV(MG/M3)
Antimony	7440-36-0	100	0.5mg/M³	0.5mg/M³

Section 3- PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS) <input type="checkbox"/> Liquid <input type="checkbox"/> Solid <input type="checkbox"/> Gas <input type="checkbox"/> Other	APPEARANCE AND ODOR Silvery or gray lustrous metal, no odor
MELTING POINT (BASE METAL) 680 °C	SPECIFIC GRAVITY 6.618g/cc

Section 4- FIRE AND EXPLOSION

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL N/A	UEL N/A
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EXTINGUISHING MEDIA

In solid form, antimony is not readily flammable. If ground into powder, or if vapors are produced, it presents a moderate fire and explosion hazard. Do not use halogenated extinguishers or water. Smother flames with dry powdered dolomite or other suitable dry powdered extinguishing agents.

SPECIAL FIRE FIGHTING PROCEDURES

No special fire fighting procedures needed. Use normal procedures, which include wearing NIOSH/OSHA approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

Section 5- REACTIVITY DATA

STABILITY

Stable in solid form

INCOMPATIBILITY (MATERIALS TO AVOID)

Acids, oxidizers, halogenated compounds, chlorine & trifluoride.

CONDITIONS TO AVOID

Thermal decomposition

HAZARDOUS DECOMPOSITION PRODUCTS

SbH³ & Sb₂O³

Section 6- HEALTH HAZARD GUIDE

MAJOR EXPOSURE HAZARD

Inhalation **Skin** **Skin Absorption** **Eye Contact** **Ingestion**

EFFECTS OF OVEREXPOSURE

INHALATION: May cause pneumonitis, liver and kidney abnormalities.

SKIN CONTACT: May cause dermatitis, skin lesions.

EYE CONTACT: No effects reported.

INGESTION: May cause liver and kidney abnormalities.

EMERGENCY & FIRST AID PROCEDURES

INHALATION: No specific information available. One should seek medical attention.

SKIN CONTACT: Remove contaminated clothing, flood skin with large amounts of water.

EYE CONTACT: Wash eyes immediately with large amounts of water occasionally lifting both upper and lower lids for at least fifteen minutes.

INGESTION: No data available, but one should obtain medical attention.

Section 7- SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCEDURES

While wearing full protective equipment, cover spill with dry sand or vermiculite. Mix well and carefully transfer to a container.

WASTE DISPOSAL METHODS

Observe all federal, state and local regulations when storing or disposing of this substance.

Section 8- SPECIAL PROTECTION

RESPIRATORY

N/A

VENTILATION

Laboratory fume hood.

EYE PROTECTION & PROTECTIVE CLOTHING

Eye protection/safety goggles are advised along with fully covered clothing and rubber gloves.

Section 9- SPECIAL PRECAUTIONS

Handling and storage: Keep container tightly closed. Store in cool, dry, well-ventilated area. Wash hands thoroughly after use. Wear lab coat and apron, flame and chemical resistant coveralls. Eye wash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

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