

**1 Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** ANTIMONY ≥ 99.5 %, powder**Article number:** 9258**CAS Number:**

7440-36-0

**EC number:**

231-146-5

**Registration number**

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Laboratory chemical

**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Carl Roth GmbH + Co. KG

Schoemperlenstraße 3-5

76185 Karlsruhe

Germany

Telefon: +49/(0)721 5606-0

Telefax: +49/(0)721 5606-149

E-Mail: [sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)**Further information obtainable from:** Department Health, Safety and Environment**1.4 Emergency telephone number:**

Poison Centre Munich

Telefon +49/(0)89 19240

**2 Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

STOT SE 3 H335 May cause respiratory irritation.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xi; Irritant

R37: Irritating to respiratory system.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS07

**Signal word** Warning**Hazard statements**

H335 May cause respiratory irritation.

**Trade name: ANTIMONY ≥ 99.5 %, powder**

(Contd. of page 1)

**Precautionary statements**

P261 Avoid breathing dust.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Additional information:**

-

**2.3 Other hazards**

All chemicals are potentially dangerous. They are therefore only be handled by specially trained personnel with the necessary care.

**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**3 Composition/information on ingredients****3.1 Chemical characterization: Substances****CAS No. Description**

7440-36-0 antimony

**Identification number(s)****EC number:** 231-146-5**Formula:** Sb**Molar mass [g/mol]:** 121,75**4 First aid measures****4.1 Description of first aid measures****After inhalation:**

Supply fresh air; if there is any trouble seek medical help.

**After skin contact:**

Rinse with water

**After eye contact:**

To be sure rinse opened eye under running water. If there is any trouble seek medical help.

**After swallowing:**

Rinse out mouth and then drink water.

Seek medical treatment.

**4.2 Most important symptoms and effects, both acute and delayed**

irritant effects

coughing

Gastric or intestinal disorders

**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

(Contd. on page 3)

**Trade name: ANTIMONY ≥ 99.5 %, powder**

(Contd. of page 2)

## 5 Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing agents:** CO<sub>2</sub>, powder, foam or water spray.

**For safety reasons unsuitable extinguishing agents:**

For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

### 5.3 Advice for firefighters

**Protective equipment:**

Wear self-contained respiratory protective device.

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

## 6 Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe dust.

Avoid contact with the eyes and skin.

### 6.2 Environmental precautions

### 6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Dispose of the material collected according to regulations.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

### 7.1 Precautions for safe handling

Provide suction extractors if dust is formed.

**Information about fire - and explosion protection:**

Risk of dust explosion if enriched with fine dust in the presence of air.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage:**

**Requirements to be met by storerooms and receptacles:**

No special requirements.

**Information about storage in one common storage facility:**

Store away from foodstuffs.

**Further information about storage conditions:**

Keep container tightly sealed.

Store in dry conditions.

**Recommended storage temperature:** 15 - 25 °C

(Contd. on page 4)

**Trade name: ANTIMONY  $\geq$  99.5 %, powder**

(Contd. of page 3)

### 7.3 Specific end use(s)

No further relevant information available.

## 8 Exposure controls/personal protection

### Additional information about design of technical facilities:

No further data; see item 7.

### 8.1 Control parameters

**Ingredients with limit values that require monitoring at the workplace:** Not required.

### Additional information:

The lists valid during the making were used as basis.

### 8.2 Exposure controls

#### Personal protective equipment:

#### General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Do not breathe dust.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

#### Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

#### Respiratory protection:



Required when dusts are generated: filter P2.

#### Protection of hands:



#### Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves

Nitrile, thickness:  $\geq$  0.11 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

#### Penetration time of glove material

Value for the permeation: Level  $\geq$  6

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### As protection from splashes gloves made of the following materials are suitable:

Nitrile, thickness:  $\geq$  0.11 mm

Value for the permeation: Level  $\geq$  6

(Contd. on page 5)

**Trade name: ANTIMONY  $\geq$  99.5 %, powder**

(Contd. of page 4)

**Eye protection:**

Tightly sealed goggles

**Body protection:**

Protective work clothing

## 9 Physical and chemical properties

**9.1 Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Powder
<b>Colour:</b>	Grey
<b>Odour:</b>	Odourless
<b>Odour threshold:</b>	No information available.

**pH-value:** No information available.

**Change in condition**

<b>Melting point/Melting range:</b>	630 °C
<b>Boiling point/Boiling range:</b>	1635 °C

**Flash point:** No information available

**Flammability (solid, gaseous):** No information available

**Ignition temperature:** No information available

**Decomposition temperature:** No information available

**Self-igniting:** No information available

**Danger of explosion:** No information available

**Explosion limits:**

<b>Lower:</b>	No information available.
<b>Upper:</b>	No information available.

**Oxidizing properties:** No information available.

**Vapour pressure:** No information available

**Density at 20 °C:** 6.69 g/cm<sup>3</sup>

**Bulk density at 20 °C:** 2000 - 3000 kg/m<sup>3</sup>

**Vapour density** No information available

**Evaporation rate** No information available

**Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** No information available

**Viscosity:**

<b>Dynamic:</b>	No information available.
<b>Kinematic:</b>	No information available.

(Contd. on page 6)

**Trade name: ANTIMONY ≥ 99.5 %, powder**

(Contd. of page 5)

**9.2 Other information**

No further relevant information available.

**10 Stability and reactivity****10.1 Reactivity**

No further relevant information available.

**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**10.3 Possibility of hazardous reactions**

Contact with the below mentioned substances may cause violent reactions or an explosion.

nitrates

metals in powder form

iodine

Risk of ignition or formation of inflammable gases or vapors with:

aluminum

halogens

Acids

Strong oxidizing agents

**10.4 Conditions to avoid**

No information available.

**10.5 Incompatible materials:**

No information available.

**10.6 Hazardous decomposition products:**

In case of fire: see item 5.

**11 Toxicological information****11.1 Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:**Oral | LD<sub>50</sub> | 7000 mg/kg (rat) (TOXNET)**Primary irritant effect:****on the skin:**

Slight irritations.

**on the eye:**

Slight irritations

**after inhalation:**

Irritations in the respiratory tract, coughing, absorption.

**Sensitization:**

No sensitizing effects known.

**CMR effects:****Germ cell mutagenicity:**

No information available.

**Carcinogenicity:**

Suspected of causing cancer by inhalation.

(Contd. on page 7)



**Trade name: ANTIMONY ≥ 99.5 %, powder**

(Contd. of page 6)

**Reproductive toxicity:**

No information available.

**Aspiration hazard:**

Not applicable.

**Specific target organ toxicity - single exposure** May cause respiratory irritation.**Specific target organ toxicity - repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Additional toxicological information:**

After swallowing irritations in the mouth, throat, oesophagus and gastrointestinal tract.

Diarrhoea

**After absorption of large quantities:**

Damage of liver and kidneys.

Damage of lungs.

**Further information:**

Further hazardous properties cannot be excluded.

The product should be handled with the care usual when dealing with chemicals.

## 12 Ecological information

**12.1 Toxicity****Aquatic toxicity:**

Quantitative data on the ecological effect of this product are not available.

**12.2 Persistence and degradability**

No further relevant information available.

**12.3 Bioaccumulative potential**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**Ecotoxicological effects:****Remark:**

Do not allow to enter waters, waste water, or soil!

**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects**

No further relevant information available.

## 13 Disposal considerations

**Waste treatment methods****Recommendation**

This material and its container must be disposed of as hazardous waste.

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

**Uncleaned packaging:****Recommendation:**


Disposal according to official regulations.

(Contd. on page 8)

Trade name: **ANTIMONY ≥ 99.5 %, powder**

(Contd. of page 7)

## 14 Transport information

<b>14.1 UN-Number</b>	
ADR, IMDG, IATA	UN2871
<b>14.2 UN proper shipping name</b>	
ADR IMDG, IATA	2871 ANTIMONY POWDER ANTIMONY POWDER
<b>14.3 Transport hazard class(es)</b>	
ADR, IMDG, IATA	
	
Class Label	6.1 Toxic substances. 6.1
<b>14.4 Packing group</b>	
ADR, IMDG, IATA	III
<b>14.5 Environmental hazards:</b>	
Marine pollutant:	No
<b>14.6 Special precautions for user</b>	
Danger code (Kemler): EMS Number:	Warning: Toxic substances. 60 F-A,S-A
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	
	Not applicable.
<b>Transport/Additional information:</b>	
-----	
ADR Limited quantities (LQ) Transport category Tunnel restriction code	 5 kg 2 E
UN "Model Regulation":	UN2871, ANTIMONY POWDER, 6.1, III

## 15 Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations:

#### Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

#### Waterhazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 15.2 Chemical safety assessment

(Contd. on page 9)



**Safety data sheet**  
**according to Regulation (EC) No. 1907/2006**



Printing date 14.05.2014

Version number 2

Revision: 14.05.2014

**Trade name: ANTIMONY ≥ 99.5 %, powder**

A Chemical Safety Assessment has not been carried out.

(Contd. of page 8)

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing MSDS:** Department: Health, Safety and Environment

**Contact:** Frau Weckemann

**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

LD50\*: Lethal Dose, 50 percent (Not relevant for classification)

LD50\*: Lethal Concentration, 50 percent (Not relevant for classification)

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

\* **Data compared to the previous version altered.**