# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.1 Revision Date 23.07.2014 Print Date 23.01.2017

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(III) oxide

Product Number : 202649 Brand : Aldrich

Index-No. : 051-005-00-X

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. : 1309-64-4

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 Chemie GmbH

Riedstrasse 2

D-89555 STEINHEIM

Telephone : +49 89-6513-1444 Fax : +49 7329-97-2319 E-mail address : eurtechsery@sial.com

1.4 Emergency telephone number

Emergency Phone # : 0800 181 7059 (CHEMTREC Deutschland)

+49 (0)696 43508409 (CHEMTREC weltweit)

#### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008

Carcinogenicity (Category 2), H351

For the full text of the H-Statements mentioned in this Section, see Section 16.

# Classification according to EU Directives 67/548/EEC or 1999/45/EC

R40

For the full text of the R-phrases mentioned in this Section, see Section 16.

# 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Warning

Hazard statement(s)

H351 Suspected of causing cancer.

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Precautionary statement(s)

P281 Use personal protective equipment as required.

Supplemental Hazard

Statements

none

#### 2.3 Other hazards - none

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Formula : O<sub>3</sub>Sb<sub>2</sub>

Molecular Weight : 291,52 g/mol
CAS-No. : 1309-64-4
EC-No. : 215-175-0
Index-No. : 051-005-00-X

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Antimony trioxide			
CAS-No. EC-No. Index-No.	1309-64-4 215-175-0 051-005-00-X	Carc. 2; H351	<= 100 %

Hazardous ingredients according to Directive 1999/45/EC

Component		Classification	Concentration
Antimony trioxide			
CAS-No.	1309-64-4	Xn, Carc.Cat.3, R40	<= 100 %
EC-No.	215-175-0		
Index-No.	051-005-00-X		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

## **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

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

## 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

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## **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 fire fighting if necessary.

#### 5.4 Further information

no data available

#### **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Pick up and arrange disposal without creating dust. 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

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

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.

### 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

Components with workplace control parameters

### 8.2 Exposure controls

### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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## 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 industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

# **Body Protection**

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: powder
b) Odour no data available
c) Odour Threshold no data available
d) pH no data available

e) Melting point/freezing Melting point/range: 655 °C - lit. point

f) Initial boiling point and

boiling range

1.550 °C - lit.

g) Flash point no data available
h) Evapouration rate no data available
i) Flammability (solid, gas) no data available
j) Upper/lower no data available

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flammability or explosive limits

k) Vapour pressure no data availablel) Vapour density no data available

m) Relative density ca.5,2 g/cm3 at 20 °C n) Water solubility 0,0287 g/l at 20 °C

 o) Partition coefficient: noctanol/water no data available

p) Auto-ignition no data available temperature

q) Decomposition no data available temperature

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

Strong reducing agents, Strong oxidizing agents

#### 10.6 Hazardous decomposition products

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 - > 34.600 mg/kg

### Skin corrosion/irritation

no data available

## Serious eye damage/eye irritation

Eyes - rabbit

Result: Mild eye irritation

(Draize Test)

### Respiratory or skin sensitisation

Maximisation Test - guinea pig

Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

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## Germ cell mutagenicity

no data available

### Carcinogenicity

Carcinogenicity - rat - Inhalation

Tumorigenic:Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Liver:Tumors.

Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Antimony trioxide)

## Reproductive toxicity

Reproductive toxicity - rat - Inhalation

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetal death.

## Specific target organ toxicity - single exposure

no data available

### Specific target organ toxicity - repeated exposure

no data available

### **Aspiration hazard**

no data available

#### **Additional Information**

RTECS: CC5650000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **SECTION 12: Ecological information**

### 12.1 Toxicity

Toxicity to fish mortality LC50 - Danio rerio (zebra fish) - > 1.000 mg/l - 96 h

(OECD Test Guideline 203)

(OECD Test Guideline 202)

Toxicity to daphnia and

Immobilization EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h

other aquatic

invertebrates

Toxicity to algae Growth inhibition EC50 - Selenastrum capricornutum (green algae) - 67 mg/l -

72 h

(OECD Test Guideline 201)

## 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

Harmful to aquatic life with long lasting effects.

no data available

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### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

no data available

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

Carc. Carcinogenicity

H351 Suspected of causing cancer.

# Full text of R-phrases referred to under sections 2 and 3

Xn Harmful

R40 Limited evidence of a carcinogenic effect.

#### **Further information**

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