

JUN 10 2014

SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 4.4
Revision Date 04/02/2014
Print Date 06/03/2014

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Potassium antimonyl tartrate trihydrate

Product Number : 383376
Brand : Sigma-Aldrich
Index-No. : 051-003-00-9
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. : 28300-74-5

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
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 4), H332
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

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

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)

H301 : Toxic if swallowed.
H332 : Harmful if inhaled.
H411 : Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 : Wash skin thoroughly after handling.
P270 : Do not eat, drink or smoke when using this product.

P271 : Use only outdoors or in a well-ventilated area.
P273 : Avoid release to the environment.
P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304 + P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 : Call a POISON CENTER or doctor/physician if you feel unwell.
P321 : Specific treatment (see supplemental first aid instructions on this label).
P330 : Rinse mouth.
P391 : Collect spillage.
P405 : Store locked up.
P501 : Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical characterization : Natural product
Synonyms : Tartar emetic
Antimony potassium tartratetrihydrate

Formula : $C_8H_4K_2O_{12}Sb_2 \cdot 3H_2O$
Molecular Weight : 667.87 g/mol
CAS-No. : 28300-74-5
EC-No. : 234-293-3
Index-No. : 051-003-00-9

Hazardous components

| Component | Classification | Concentration |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------|
| Dipotassium bis[μ-(tartrato(4-)-o1,o2:o3,o4)]diantimonate(2-) trihydrate | | |
| | Acute Tox. 3; Acute Tox. 4; Aquatic Acute 2; Aquatic Chronic 2; H301, H332, H411 | - |

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

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. Move out of dangerous area.

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. Take victim immediately to hospital. Consult a physician.

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. 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

| Component | CAS-No. | Value | Control parameters | Basis |
|---------------------------------------------------------------------------------------|--------------------------------|-------|--------------------|----------------------------------------------------------------------------------|
| Dipotassium bis[[tartrato(4-)- 0,1,0,2:0,3,0,4]]dianim onate(2-) trihydrate | 28300-74-5 | TWA | 0,5 mg/m3 | USA, Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 0,5 mg/m3 | USA, ACGIH Threshold Limit Values (TLV) |
| Remarks | Skin & Upper Respiratory Tract | | | |

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- 8.1 Control parameters**
 Components with workplace control parameters
- 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.
 Keep container tightly closed in a dry and well-ventilated place.
 Keep in a dry place.
- 7.2 Conditions for safe storage, including any incompatibilities**
 Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- 7.3 Specific end use(s)**
 Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**
 Wear respiratory protection. 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.

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**
 Carbon oxides, Potassium oxides, Antimony oxide
- 5.3 Advice for firefighters**
 Wear self contained breathing apparatus for fire fighting if necessary.
- 5.4 Further information**
 no data available

| Exposure controls | Exposure Limits |
|---------------------------------------------------------------|-----------------|
| USA, OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 | 0,5 mg/m3 |
| USA, NIOSH Recommended | 0,5 mg/m3 |

- 9.1 Information on basic physical and chemical properties**
- a) Appearance**
 Form: powder
 Colour: white
- b) Odour**
 no data available
- c) Odour Threshold**
 no data available
- d) pH**
 4 at 20 °C (68 °F)
- e) Melting point/freezing point**
 Melting point/range: >= 300 °C (>= 572 °F) - lit.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Control of environmental exposure
 approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Respiratory protection
 Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (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).

Body Protection
 Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
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- f) Initial boiling point and boiling range no data available
- g) Flash point no data available
- 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 2.600 g/cm³
- n) Water solubility soluble
- 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

Bulk density 1.3 g/l

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**
Mineral acids, Strong bases, Carbonates, Lead, Silver salts, Strong oxidizing agents
- 10.6 **Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 115 mg/kg

Dermal: no data available

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Human

fibroblast

Cytogenetic analysis

rat

Cytogenetic analysis

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

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: CC6825000

Potassium antimony tartrate is the most potent trivalent antimony compound. Trivalent antimony compounds are more toxic than the pentavalent because they are excreted slowly., Gastrointestinal disturbance, Headache, Dizziness, Weakness, Kidney injury may occur.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 37 mg/l - 4 d

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 5 mg/l - 48 h

12.2 Persistence and degradability

12.3 Bioaccumulative potential

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 30 d - 12 mg/l

Bioconcentration factor (BCF): 3.4

CAS-No. 28300-74-5
 Revision Date 2007-07-01

12.4 Mobility in soil
 no data available

12.5 Results of PBT and VPB assessment
 PBT/VPB assessment not required/not conducted

12.6 Other adverse effects
 An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
 Toxic to aquatic life.

16. OTHER INFORMATION

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

Acute Tox. Acute toxicity

Acute aquatic toxicity

Aquatic Chronic Chronic aquatic toxicity

H301 Toxic if swallowed.

H332 Harmful if inhaled.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

HMS Rating

Health hazard: 2

Chronic Health Hazard: *

Flammability: 0

Physical Hazard: 0

NFPA Rating

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Preparation Information

Sigma-Aldrich Corporation
 Product Safety – Americas Region

1-800-521-8956

Version: 4.4

Revision Date: 04/02/2014

Print Date: 06/03/2014

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
 Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. 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.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1551 Class: 6.1 Packing group: III

Proper shipping name: Antimony potassium tartrate

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 1551 Class: 6.1 Packing group: III

Proper shipping name: ANTIMONY POTASSIUM TARTRATE

Marine pollutant: No

IATA

UN number: 1551 Class: 6.1 Packing group: III

Proper shipping name: Antimony potassium tartrate

15. REGULATORY INFORMATION

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.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:
 CAS-No. 28300-74-5
 Revision Date 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

CAS-No. 28300-74-5
 Revision Date 2007-07-01

New Jersey Right To Know Components

Sigma-Aldrich - 383376