

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Substance name	: Potassium Antimony Tartrate, Trihydrate
CAS-No.	: 28300-74-5
Product code	: LC18710
Formula	: C ₈ H ₄ K ₂ O ₁₂ Sb ₂ ·3H ₂ O
Synonyms	: 2,3-dihydroxy butanedioic acid antimonypotassium salt, trihydrate / antimonate(2-), bis[mu-tartrato(4-)]di-, dipotassium, trihydrate / antimony potassium salt tartaric acid, trihydrate / antimony potassium tartrate, trihydrate / potassium antimony(III) oxide tartrate, trihydrate / tartarized antimony, trihydrate

1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Use as laboratory reagent
Recommended use	: Laboratory chemicals
Restrictions on use	: Not for food, drug or household use

1.3. Supplier

LabChem, Inc.
1010 Jackson's Pointe Ct.
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or +1-703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 3 H301 Toxic if swallowed
Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: H301 - Toxic if swallowed
Precautionary statements (GHS US)	: P264 - Wash exposed skin thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - If swallowed, rinse mouth P405 - Store locked up. P501 - Dispose of contents/container to comply with local, state and federal regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS US classification
Potassium Antimony Tartrate, Trihydrate (Main constituent)	(CAS-No.) 28300-74-5	100	Acute Tox. 3 (Oral), H301

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	: Rinse with water. Do not apply (chemical) neutralizing agents without medical advice. Take victim to a doctor if irritation persists.
First-aid measures after eye contact	: Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Take victim to an ophthalmologist if irritation persists.
First-aid measures after ingestion	: Rinse mouth with water. Give nothing to drink. Victim is fully conscious: immediately induce vomiting. Induce vomiting by giving a 0.9 % saline solution. Do not apply (chemical) neutralizing agents without medical advice. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Harmful if swallowed. Non-toxic in contact with skin (LD50 skin > 5000 mg/kg). Harmful if inhaled.
Symptoms/effects after inhalation	: AFTER INHALATION OF DUST: Dry/sore throat. EXPOSURE TO HIGH CONCENTRATIONS: Respiratory difficulties.
Symptoms/effects after skin contact	: No effects known.
Symptoms/effects after eye contact	: No effects known.
Symptoms/effects after ingestion	: Vomiting. Nausea. Abdominal pain. AFTER ABSORPTION OF LARGE QUANTITIES: Dizziness. Muscular pain. Disturbances of consciousness.
Chronic symptoms	: Skin rash/inflammation. Feeling of weakness. Pain in the joints. Affection of the renal tissue. Change in the haemogramme/blood composition. Risk of pneumonia.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Adapt extinguishing media to the environment for surrounding fires.

5.2. Specific hazards arising from the chemical

Fire hazard	: DIRECT FIRE HAZARD. Non combustible.
Hazardous decomposition products in case of fire	: On burning: formation of metallic fumes and release of carbon monoxide - carbon dioxide.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus.
- Emergency procedures : Mark the danger area. Prevent dust cloud formation. No naked flames. Wash contaminated clothes.
- Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Do not breathe dust.
- Emergency procedures : Ventilate area. Stop release.

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray.
- Methods for cleaning up : Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid raising dust. Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Do not discharge the waste into the drain. Keep container tightly closed.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

- Incompatible products : Strong acids. Strong bases. Strong oxidizers.
- Incompatible materials : incompatible materials. Direct sunlight.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.
- Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. strong acids. (strong) bases.
- Storage area : Store at room temperature. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium Antimony Tartrate, Trihydrate (28300-74-5)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	0.5 mg/m³
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m³)	0.5 mg/m³
USA - IDLH - Occupational Exposure Limits	
US IDLH (mg/m³)	50 mg/m³ as Sb
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m³)	0.5 mg/m³

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8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter type P3.

Hand protection:

Gloves

Eye protection:

Face shield. In case of dust production: protective goggles

Skin and body protection:

Protective clothing

Respiratory protection:

Dust production: dust mask with filter type P3

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline solid. Powder.
Color	: Colourless to white
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: 232 – 233 °C (Anhydrous form, EU Method A.1: Melting/freezing point)
Freezing point	: No data available
Boiling point	: 665 °C (Anhydrous form)
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 0 hPa (25 °C, QSAR, No data available)
Relative vapor density at 20 °C	: Not applicable
Relative density	: 2.6 (20 °C, Anhydrous form)
Specific gravity / density	: 2600 kg/m ³
Molecular mass	: 378.97 g/mol
Solubility	: Moderately soluble in water. Substance sinks in water. Water: 8.3 g/100ml (20 °C, Anhydrous form)
Log Pow	: -4.21 (Estimated value, KOWWIN)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Not applicable.
Oxidizing properties	: No data available.

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9.2. Other information

VOC content : 0 %
Other properties : Translucent.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Avoid dust formation. Direct sunlight.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Antimony and its oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Toxic if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Potassium Antimony Tartrate, Trihydrate (28300-74-5)

LD50 oral rat	115 mg/kg
LD50 dermal rabbit	20000 mg/kg body weight (4 h, Rabbit, Female, Experimental value, Dermal)
ATE US (oral)	115 mg/kg body weight
ATE US (dermal)	20000 mg/kg body weight

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Likely routes of exposure : Inhalation. Skin and eye contact.
Potential Adverse human health effects and symptoms : Harmful if swallowed. Non-toxic in contact with skin (LD50 skin > 5000 mg/kg). Harmful if inhaled.
Symptoms/effects after inhalation : AFTER INHALATION OF DUST: Dry/sore throat. EXPOSURE TO HIGH CONCENTRATIONS: Respiratory difficulties.
Symptoms/effects after skin contact : No effects known.
Symptoms/effects after eye contact : No effects known.
Symptoms/effects after ingestion : Vomiting. Nausea. Abdominal pain. AFTER ABSORPTION OF LARGE QUANTITIES: Dizziness. Muscular pain. Disturbances of consciousness.
Chronic symptoms : Skin rash/inflammation. Feeling of weakness. Pain in the joints. Affection of the renal tissue. Change in the haemogramme/blood composition. Risk of pneumonia.

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SECTION 12: Ecological information

12.1. Toxicity

- Ecology - general : Dangerous for the environment.
- Ecology - air : Not included in the list of substances which may contribute to the greenhouse effect (IPCC).
Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
- Ecology - water : Toxic to crustacea. Slightly harmful to fishes. Slightly harmful to algae.

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LC50 fish 1	173 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Static system, Fresh water, Experimental value, Lethal)
ErC50 (algae)	206 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Fresh water, Experimental value, Antimony)

12.2. Persistence and degradability

Potassium Antimony Tartrate, Trihydrate (28300-74-5)

Persistence and degradability	Readily biodegradable in water.
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12.3. Bioaccumulative potential

Potassium Antimony Tartrate, Trihydrate (28300-74-5)

BCF fish 1	3.162 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)
Log Pow	-4.21 (Estimated value, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Potassium Antimony Tartrate, Trihydrate (28300-74-5)

Log Koc	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

- Waste disposal recommendations : Use appropriate containment to avoid environmental contamination. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse.
- Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

- Transport document description : UN1551 Antimony potassium tartrate, 6.1, III
- UN-No.(DOT) : UN1551
- Proper Shipping Name (DOT) : Antimony potassium tartrate
- Transport hazard class(es) (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
- Packing group (DOT) : III - Minor Danger
- Hazard labels (DOT) : 6.1 - Poison



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DOT Packaging Non Bulk (49 CFR 173.xxx)	: 213
DOT Packaging Bulk (49 CFR 173.xxx)	: 240
DOT Special Provisions (49 CFR 172.102)	: IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2). IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner. T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 153
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 100 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 200 kg
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information	: No supplementary information available.

Transport by sea

Transport document description (IMDG)	: UN 1551 antimony potassium tartrate, 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
UN-No. (IMDG)	: 1551
Proper Shipping Name (IMDG)	: antimony potassium tartrate
Class (IMDG)	: 6.1 - Toxic substances
Packing group (IMDG)	: III - substances presenting low danger
EmS-No. (1)	: F-A
EmS-No. (2)	: S-A

Air transport

Transport document description (IATA)	: UN 1551 Antimony potassium tartrate, 6.1, III, ENVIRONMENTALLY HAZARDOUS
UN-No. (IATA)	: 1551
Proper Shipping Name (IATA)	: Antimony potassium tartrate
Class (IATA)	: 6.1 - Toxic Substances
Packing group (IATA)	: III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Potassium Antimony Tartrate, Trihydrate (28300-74-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313		
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb	
SARA Section 311/312 Hazard Classes	Health hazard - Acute toxicity (any route of exposure)	
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.		
Potassium Antimony Tartrate, Trihydrate	CAS-No. 28300-74-5	100%

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15.2. International regulations

CANADA

Potassium Antimony Tartrate, Trihydrate (28300-74-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Revision date : 07/22/2020

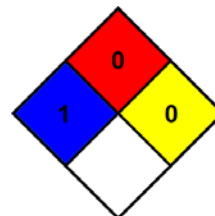
Full text of H-phrases: see section 16:

H301	Toxic if swallowed
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NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

Personal protection : F

F - Safety glasses, Gloves, Synthetic apron, Dust respirator

SDS US LabChem

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