MATERIAL SAFETY DATA SHEET

NFPA	HMIS	Personal Protective Equipment

See Section 8.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code:	A1561
Product Name:	POTASSIUM ANTIMONY TARTRATE TRIHYDRATE, REAGENT, ACS
Chemical Name:	No information available
Synonyms:	Antimonate(2)-, bis(mu-tartrato(4-))di-, dipotassium, trihydrate Antimonyl potassium tartrate Tartrate antimonio-potassique [French]; Emetique (French) Potassium antimonyl tartrate trihydrate Tartar emetic Tartaric acid, antimony potassium salt, trihydrate Tartarized antimony Tartox Tartrated antimony Potassium antimonyl tartrate Potassium antimonyl d-tartrate Potassium antimony tartrate Tartaric acid, antimony potassium salt Antimonate(2-), bis[.mu.-[2,3-di(hydroxy-.kappa.O)butanedioato(4-)-.kappa.O1:.kappa.O4]]di-, potassium, hydrate (1:2:3), stereoisomer (CA INDEX NAME) Antimonate(2-), bis[.mu.-[2,3-di(hydroxy-.kappa.O)butanedioato(4-)-.kappa.O1:.kappa.O4]]di-, dipotassium, trihydrate, stereoisomer (9CI) Antimonate(2-), bis[.mu.-[2,3-dihydroxybutanedioato(4-)-O1,O2:O3,O4]]di-, dipotassium, trihydrate, stereoisomer Butanedioic acid, 2,3-dihydroxy- [R-(R*,R*)]-, antimony complex Antimonate(1-), aqua[tartrato(4-)]-, potassium, sesquihydrate, dimer Antimonate(1-), oxo(tartrato)-, potassium sesquihydrate, dimer Antimonium tartaricum Antimonyl potassium tartrate, sesquihydrate Butanedioic acid, 2,3-dihydroxy- (2R,3R)-, antimony potassium salt Dipotassium di-.mu.-d-tartrato(4-)-bis(antimonate(III)) trihydrate
Recommended use:	Mordant in textile and leather industries.
CAS #:	28300-74-5
Formula:	C8-H4-K2-O12-Sb2.3H2O

RTECS #	CC6825000
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Order Online At:	**https://www.spectrumchemical.com**
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Regina Wachenheim (East Coast)
Contact Person:	Martin LaBenz (West Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING!

Harmful if swallowed

May cause skin and eye irritation

May cause irritation of respiratory tract

Odor:	**Physical state:**	**Appearance:**	**Color:**
Odorless.	Solid.	Powder.	White.

OSHA Regulatory Status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:
May cause skin irritation.

Eye Contact:
Contact with eyes may cause irritation.

Inhalation:
Harmful by inhalation. May cause irritation of respiratory tract.

Ingestion:
Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. May cause abdominal pain. May cause nausea and vomiting. May cause diarrhea. It may affect the kidneys. May affect the liver. May affect respiration. May cause central nervous system effects. May affect the cardiovascular system. Pupils of the eyes may be excessively dilated and be either non-reactive to light react sluggishly to light.

Chronic Potential Health Effects:

Component	**Carcinogen Status:**
Antimony Potassium Tartrate 28300-74-5 (100)	No information available

Target Organs: Liver. Kidneys. Respiratory system. Lungs. Eyes. Skin. Cardiovascular system.

Mutagenic Effects: May affect genetic material

Teratogenic Effects: No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Antimony Potassium Tartrate	28300-74-5	100

4. FIRST AID MEASURES

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Toxic if swallowed. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

Notes to Physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	No information available.

Flash Point Tested according to:
Not available

Lower Explosion Limit (%):	No information available

Upper Explosion Limit (%):	No information available

Autoignition Temperature (°C/°F):	No information available

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Water spray mist or foam.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide; Antimony/Antimony oxides; Potassium oxides

Specific hazards: May be combustible at high temperatures. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific Methods: Dike fire-control water for later disposal; do not scatter the material. Cool containers / tanks with spray water. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods for Cleaning Up:
Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapours/dust. Avoid dust formation. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:
Acids. Halogenated acids. mineral acids. Tannic and Gallic acids. Reducing agents. Strong oxidizing agents. carbonates. Lead and silver salts. Alkali hydroxides. Mercury bichloride. Lime water. Albumin.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Eye protection: Safety glasses. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Wear respirator with dust filter..

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Antimony Potassium Tartrate - 28300-74-5	0.5 mg/m^3 TWA (as Sb)	0.5 mg/m^3 TWA (as Sb)	0.5 mg/m^3 TWA (as Sb)	None

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
Antimony Potassium Tartrate 28300-74-5	0.5 mg/m^3 TWA (as Sb)	0.5 mg/m^3 TWA (as Sb)	0.5 mg/m^3 TWA (as Sb)	0.5 mg/m^3 TWAEV (as Sb)

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Antimony Potassium Tartrate 28300-74-5	0.5 mg/m^3 TWA (as Sb)	0.5 mg/m^3 TWA (as Sb)

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Solid.

Appearance:
Powder.

Color:
White.

Odor:
Odorless.

Molecular/Formula weight:
No information available

Taste
Sweetish. Metallic.

Flash point (°C):
Not applicable

Lower Explosion Limit (%):
No information available

Upper Explosion Limit (%):
No information available

Autoignition Temperature (°C/°F):
No information available

Melting point/range(°C/°F):
No information available

Boiling point/range(°C/°F):
No information available

pH:
No information available

Decomposition temperature(°C/°F):
No information available

Specific gravity:
2.6

Density (g/cm3):
No information available

Bulk density:
No information available

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

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

Miscibility:
No information available

Solubility:
Insoluble in alcohol
Soluble in Water
Solubility in Water: 8.3 g/100 ml @ 20 °C
Soluble in Glycerol

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions

Conditions to avoid: Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Incompatible Materials: Acids. Halogenated acids. mineral acids. Tannic and Gallic acids. Reducing agents. Strong oxidizing agents. carbonates. Lead and silver salts. Alkali hydroxides. Mercury bichloride. Lime water. Albumin.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. When heated to decomposition it emits toxic fumes. Oxides of potassium. Antimony. Antimony oxide.

Possibility of Hazardous Reactions: Reduction may form stibine which is toxic.

Polymerization: Hazardous polymerisation does not occur

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Antimony Potassium Tartrate - 28300-74-5

LD50/oral/rat = 115 mg/kg
LD50/oral/mouse = 600 mg/kg
LD50/dermal/rat = No information available
LD50/dermal/rabbit = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No infomation available
Other LD50 or LC50information = 115 mg/kg oral LD50 [Rabbit]

Product Information

LC50/inhalation/rat No information available
LC50/Inhalation/mouse No information available
LD50/dermal/rabbit No information available
LD50/dermal/rat No information available
LD50/oral/mouse = 600mg/kg
LD50/oral/rat 115mg/kg

Local Effects

Skin irritation: May cause skin irritation. May cause pustular vesicular lesions.

Eye irritation: May cause eye irritation

Inhalation: Harmful by inhalation. May cause irritation of respiratory tract. Symptoms may include coughing and shortness of breath.

Ingestion: Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting, diarrhea. May cause abdominal pain. May cause salivation. May cause ulcerations in the esophagus and stomach. May cause muscle weakness and muscle pain. May affect liver . May affect urinary system (kidneys). May cause mydriasis (dilated pupils). May affect the cardiovascular system (hypotension). May affect respiration (dyspnea - difficulty breathing and shortness of breath; hyperventilation). May affect the cardiovascular system (slow heart rate (bradycardia)). May affect the cardiovascular system (cardiac arrhythmias). May cause hemolytic anemia. May affect behavior/central nervous system (dizziness, headache). May affect behavior/central nervous system (somnolence). May affect behavior/central nervous system (hallucinations, distorted perceptions, irritability, loss of sleep).

Sensitization: No information available

Chronic Toxicity

Chronic Toxicity Chronic exposure may affect the liver and kidneys. Prolonged or repeated ingestion may affect the cardiovascular system. Prolonged or repeated ingestion may cause weight loss.

Carcinogenic effects: Not considered carcinogenic

Components	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances

Antimony Potassium Tartrate	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects: May affect genetic material

Reproductive Effects: No information available

Teratogenic Effects: No information available

Target Organs: Liver. Kidneys. Respiratory system. Lungs. Eyes. Skin. Cardiovascular system.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available

Ecotoxicity effects: No data available.

Aquatic toxicity: No information available

Mobility: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Antimony Potassium Tartrate	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1551
Proper Shipping Name: Antimony potassium tartrate
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: Not applicable
Marine Pollutant No data available
ERG No: 151
DOT RQ (lbs): No information available
Symbol(s): R3

TDG (Canada)

UN-No: UN1551
Proper Shipping Name: Antimony potassium tartrate
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available

Description: No information available

ADR

UN-No: UN1551
Proper Shipping Name: Antimony potassium tartrate
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: UN1551
Proper Shipping Name: Antimony potassium tartrate
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
EMS: F-A
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: UN1551
Proper Shipping Name: Antimony potassium tartrate
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: 6.1
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN1551
Proper Shipping Name: Antimony potassium tartrate
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Description: No information available

IATA

UN-No: UN1551
Proper Shipping Name: Antimony potassium tartrate
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
ERG Code: 6L
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Antimony Potassium Tartrate	Not Listed	Present	Not present	2-2953	Present	Present	Not present

U.S. Regulations

Antimony Potassium Tartrate

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: Present
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List Present
Minnesota - Hazardous Substance List: Present (as Antimony compounds)
New York Release Reporting - List of Hazardous Substances:
100 lb RQ
Louisana Reportable Quantity List for Pollutants: 100lbfinal RQ
45.4kgfinal RQ
California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcment Act of 1986.

Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Antimony Potassium Tartrate	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting *de minimis*
Antimony Potassium Tartrate	100 lb final RQ 45.4 kg final RQ	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Antimony Potassium Tartrate	Not Applicable	Not Applicable

Canada

WHMIS hazard class:
D1B Toxic materials

Antimony Potassium Tartrate
D1B

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Antimony Potassium Tartrate	1% (as Antimony compounds)

Inventory

Components	Canada (DSL)	Canada (NDSL)
Antimony Potassium Tartrate	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
Antimony Potassium Tartrate	Not listed	Not listed

EU Classification

R-phrase(s)
R20 - Harmful by inhalation.
R22 - Harmful if swallowed.
R51 - Toxic to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment.

S -phrase(s)
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

Components	Classification	Safety Phrases
Antimony Potassium Tartrate	For Antimony compounds: Xn, R20/22 N, R51/53	For Antimony compounds: S61

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
Xn - Harmful.
N - Dangerous for the environment.

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

Preparation Date: 25-Jul-2013

Reason for revision: Not applicable

Prepared by: Sonia Owen

Literature reference: No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.