# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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ALFAA39524

## Potassium antimonate trihydrate

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 锑酸钾三水合物

Product Description: Potassium antimonate trihydrate

Cat No.: 39524

Molecular Formula KSbO3.3H2 O

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

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Emergency Telephone Number For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

**E-mail address** begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

## **SECTION 2. HAZARD IDENTIFICATION**

Physical StateAppearanceOdorSolid CrystallineNo information availableOdorless

**Emergency Overview** 

Harmful if swallowed. Harmful if inhaled. Toxic to aquatic life with long lasting effects.

## Classification of the substance or mixture

Acute Oral Toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Chronic aquatic toxicity	Category 2

#### **Label Elements**



Signal Word Warning

**Hazard Statements** 

H411 - Toxic to aquatic life with long lasting effects

## Potassium antimonate trihydrate

H302 + H332 - Harmful if swallowed or if inhaled

## **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed 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

#### Response

P312 - Call a POISON CENTER or doctor if you feel unwell

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P330 - Rinse mouth

#### Storage

P403 - Store in a well-ventilated place

#### **Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

## **Physical and Chemical Hazards**

None identified.

#### **Health Hazards**

Harmful if swallowed. Harmful if inhaled.

#### **Environmental hazards**

Toxic to aquatic life with long lasting effects.

This product does not contain any known or suspected endocrine disruptors.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Potassium antimonate trihydrate	N/A	<=100
Potassium hexahydroxoantimonate	12208-13-8	0

Note

Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture

## **SECTION 4. FIRST AID MEASURES**

## **General Advice**

If symptoms persist, call a physician.

## **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

## Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

None reasonably foreseeable.

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

## Potassium antimonate trihydrate

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#### Notes to Physician

Treat symptomatically.

## **SECTION 5. FIRE-FIGHTING MEASURES**

## **Suitable Extinguishing Media**

Not combustible.

## Extinguishing media which must not be used for safety reasons

No information available.

## **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

#### **Environmental Precautions**

Do not flush into surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to contaminate ground water system.

## Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

## Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Storage

Keep container tightly closed in a dry and well-ventilated place.

## Specific Use(s)

Use in laboratories

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

Component	China	Taiwan	Thailand	Hong Kong
Potassium	-	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	-
hexahydroxoantimonate				

Component	ACGIH TLV	OSHA PEL	NIOSH	The United Kingdom	European Union
Potassium	TWA: 0.5 mg/m <sup>3</sup>	(Vacated) TWA: 0.5	IDLH: 50 mg/m <sup>3</sup>	STEL: 1.5 mg/m <sup>3</sup> 15	
hexahydroxoantimonate	_	mg/m³	TWA: 0.5 mg/m <sup>3</sup>	min	
			-	TWA: 0.5 mg/m <sup>3</sup> 8 hr	

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Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

#### **Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### **Exposure Controls**

## **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

## Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Blove material Breakthrough time		EU standard	Glove comments
Viton (R)	480 minutes	0.11mm	EN 374	(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use In case of insufficient ventilation, wear suitable respiratory equipment

Recommended Filter type: Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** Prevent product from entering drains. Do not allow material to contaminate ground water

system.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** 

Physical State Solid Crystalline

**Odor** Odorless

Odor Threshold No data available PH Not applicable

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Solid

Solid

**Melting Point/Range** No data available **Softening Point** No data available

**Boiling Point/Range** No information available

**Flash Point** Method - No information available No information available Solid

**Evaporation Rate** Not applicable

No information available Flammability (solid,gas) No data available **Explosion Limits** 

No data available **Vapor Pressure Vapor Density** Not applicable

Specific Gravity / Density No data available **Bulk Density** No data available **Water Solubility** No information available Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

**Autoignition Temperature** No data available **Decomposition Temperature** No data available **Viscosity** Not applicable

No information available **Explosive Properties** 

**Oxidizing Properties** No information available

Molecular Formula KSbO3.3H2 O **Molecular Weight** 262.90 (208.85anhy)

## **SECTION 10. STABILITY AND REACTIVITY**

Stability Stable under normal conditions.

**Hazardous Reactions** None under normal processing. **Hazardous Polymerization** No information available.

**Conditions to Avoid** None known.

Acids. Materials to avoid

Hazardous Decomposition Products Potassium oxides. Antimony oxide.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Product Information**

(a) acute toxicity;

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation			
Potassium hexahydroxoantimonate			LC50 > 5.4 mg/L (Rat) 4 h			

(b) skin corrosion/irritation; No data available

No data available (c) serious eye damage/irritation;

(d) respiratory or skin sensitization;

No data available Respiratory No data available Skin

No data available (e) germ cell mutagenicity;

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(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable

Solid

Symptoms / effects,both acute and No information available

delayed

## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity effects Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow

material to contaminate ground water system.

Persistence and Degradability Product contains heavy metals. Discharge into the environment must be avoided. Special

pre-treatment is necessary

Persistence

Degradation in sewage

treatment plant

May persist.

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

Bioaccumulative Potential Product has a high potential to bioconcentrate

Mobility in soil No information available

Endocrine Disruptor Information Persistent Organic Pollutant

Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains. Do not let this

chemical enter the environment.

## **SECTION 14. TRANSPORT INFORMATION**

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#### **Road and Rail Transport**

UN-No UN1549

Proper Shipping Name Antimony compound, inorganic, solid, n.o.s.

**Technical Shipping Name** (Potassium antimonate trihydrate)

Hazard Class 6.1 Packing Group III

IMDG/IMO

UN-No UN1549

**Proper Shipping Name** Antimony compound, inorganic, solid, n.o.s.

Technical Shipping Name (Potassium antimonate trihydrate)

Hazard Class 6.1 Packing Group III

IATA

UN-No UN1549

Proper Shipping Name Antimony compound, inorganic, solid, n.o.s.

Technical Shipping Name (Potassium antimonate trihydrate)

Hazard Class 6.1
Packing Group

Special Precautions for User No special precautions required

## **SECTION 15. REGULATORY INFORMATION**

#### International Inventories

X = listed, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	, – ,	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Potassium hexahydroxoantimonat	-	-	Х	Х	235-387-7	-	-	Х	Х	Х	1	KE-29121
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Note

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#### **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 01-May-2024

**Revision Summary** New emergency telephone response service provider.

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**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

#### Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances Substances List **ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

OECD - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

#### **Disclaimer**

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**End of Safety Data Sheet**