# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

# Trade name

Potassium hexahydroxoantimonate (V)

#### CAS number

12208-13-8

#### EC number

235-387-7

#### **Synonyms**

Potassium hexahydroxoantimonate

# 1.2. Relevant identified uses of the substance or mixture and uses advised against *Relevant identified uses*

Research and development.

### Not suitable for use in

Not suitable for human consumption or veterinary purposes.

# 1.3. Details of the supplier of the safety data sheet

# **Supplier**

Molekula Group

#### Street address

Molekula Ltd, Lingfield Way, Darlington,

**DL1 4XX Darlington** 

United Kingdom

#### Telephone

+44 (0) 3302 000 333

#### Email

info@molekula.com

Web site

www.molekula.com

#### Contact person

Kevin Banks

# Email address

+44 (0) 7769276927

### 1.4. Emergency telephone number

# Poison center/Additional emergency number

0344 892 0111 - National Poisons Information Service (Newcastle Centre)

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued**: 2023-08-30

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

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

#### Classification

Hazardous to the aquatic environment — Chronic hazard category 2 Acute toxicity, oral, hazard category 4 Acute toxicity, inhalation, hazard category 4

#### Hazard statements

H302, H332, H411

#### 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

# Hazard pictograms





## Signal word

Warning

#### Hazard statements

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

P261 Avoid breathing dust/fumes/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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

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

P308 + P313 IF exposed or concerned: Get medical advice/attention.

#### 2.3. Other hazards

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

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

#### 3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Potassium hexahydroxoanti- monate (V)	12208-13-8 235-387-7 -	100%	Acute Tox. 4 - oral, Acute Tox. 4 - inhalation, Aquatic Chronic 2	-	-

### Molecular weight

262.90

# Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

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

## 4.1. Description of first aid measures

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel.

#### **Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

#### Skin contact

IF ON SKIN: Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention. Get medical advice/attention if you feel unwell.

# Eye contact

Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.

#### **Ingestion**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

# **Information for doctors**

First aiders/ medical personnel need to protect themselves.

### 4.2. Most important symptoms and effects, both acute and delayed

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

# **Inhalation**

Single exposure may cause the following adverse effects: Upper respiratory irritation. Difficulty in breathing.

#### Skin contact

Single exposure may cause the following adverse effects: Severe skin irritation.

#### Eye contact

Single exposure may cause the following adverse effects: Severe irritation.

#### **Ingestion**

Single exposure may cause the following adverse effects: Severe abdominal pain. Nausea, vomiting.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No special treatment requirement.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

# Suitable extinguishing media

In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

#### Unsuitable extinguishing media

No specific fire fighting procedure given.

# 5.2. Special hazards arising from the substance or mixture

Specific hazards: Not combustible.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Potassium oxides

Oxides of: Antimony.

Ambient fire may liberate hazardous vapours.

### 5.3. Advice for firefighters

# Special protective equipment for fire-fighters

Evacuate area. Avoid breathing gas, fume, vapours or spray. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

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

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

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Avoid contact with skin and eyes. For personal protection, see section 8.

# 6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

# 6.3. Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

#### 6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

# Preventive handling precautions

For precautions see section 2.2. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide adequate ventilation. Avoid ingestion and inhalation. Work under hood

#### General hygiene

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling.

# 7.2. Conditions for safe storage, including any incompatibilities

Store at ambient temperature. Store in a dry place. Store in a closed container.

# 7.3. Specific end use(s)

No specific usage precautions noted.

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **Exposure limits**

TWA: 0.5mg/m3 UK. EH40 WEL = Workplace Exposure Limit.

# 8.2. Exposure controls

#### Eye / face protection

Wear eye protection.

# **Hand protection**

Wear protective gloves. Recommended gloves: Nitrile.

Glove Thickness: 0.11mm Breakthrough time: 8 hours

Always inspect gloves before use. If signs of wear and tear are noticed then the gloves should be replaced.

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash contaminated skin thoroughly after handling.

# Other skin protection

Wash skin thoroughly after handling.

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued**: 2023-08-30

# Respiratory protection

Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.

# Environmental exposure controls

Avoid discharge into drains.

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

# 9.1. Information on basic physical and chemical properties

### Physical state

Solid

#### Colour

White / off-white.

#### **Odour**

No data available

# Melting point / freezing point

> 300 °C

# Boiling point or initial boiling point and boiling range

No data available

# **Flammability**

No data available

# Lower and upper explosion limit

No data available

# Flash point

No data available

### **Auto-ignition temperature**

No data available

### **Decomposition temperature**

No data available

#### <u>рН</u>

No data available

### Kinematic viscosity

No data available

# **Solubility**

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

# Partition coefficient n-octanol/water

No data available

#### Vapour pressure

No data available

# **Density and/or relative density**

No data available

#### Relative vapour density

No data available

### Particle characteristics

No data available

#### 9.2. Other information

No data available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under the prescribed storage conditions.

# 10.3. Possibility of hazardous reactions

Violent reactions possible with:

Acids.

#### 10.4. Conditions to avoid

No data available

# 10.5. Incompatible materials

Strong oxidising agents.

# 10.6. Hazardous decomposition products

See section 5.

# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 <u>Acute toxicity</u>

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure
Potassium hexahydrox- oantimonate (V) 12208-13-8 / 235-387-7	LD50	500.1 mg/kg	Oral	-
Potassium hexahydrox- oantimonate (V) 12208-13-8 / 235-387-7	LC50	1.5 mg/l	Inhalation.	4 hours

# Aspiration hazard

Based on available data, the classification criteria are not met.

#### 11.2. Information on other hazards

No data available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
Potassium hexahydrox- oantimonate (V) 12208-13-8 / 235-387-7	LC50	>164 mg/l	24 hours	Daphnia magna

# 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

No data available

# 12.6. Endocrine disrupting properties

No data available

# 12.7. Other adverse effects

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued**: 2023-08-30

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

### **Disposal considerations**

Dispose of contents/container in accordance with local/regional/national/international regulations.

# **SECTION 14: Transport information**

#### 14.1. UN number

1549

# 14.2. UN proper shipping name

# ADR / RID / ADN proper shipping name

ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S. (Potassium hexahydroxoantimonate (V))

# IMDG proper shipping name

ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S. (Potassium hexahydroxoantimonate (V))

# IATA proper shipping name

Antimony compound, inorganic, solid, n.o.s. (Potassium hexahydroxoantimonate (V))

# 14.3. Transport hazard class(es)

#### Label

ADR/RID/ADN



6.1

**IMDG** 



6.1

IATA



6.1

# ADR / RID Class

6.1

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

# ADR / RID Classification code

T5

### ADR / RID hazard identification number

60

# **IMDG Class**

6.1

#### IATA Class

6.1

### **ADN Class**

6. 1

#### ADN Class Code

Т5

### 14.4. Packing group

ADR / RID / ADN: III

IMDG: III IATA: III

#### 14.5. Environmental hazards

#### **IMDG EmS**

F-A, S-A

# 14.6. Special precautions for user

Tunnel restriction code: E Transport category: 2

# 14.7. Maritime transport in bulk according to IMO instruments

IBC Instruction: IBC08

# **SECTION 15: Regulatory information**

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

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

# National regulations

Directive: 2012/18/EU E2 ENVIRONMENTAL HAZARDS

# 15.2. Chemical safety assessment

# Potassium hexahydroxoantimonate (V)



Version number:

**Issued:** 2023-08-30

# **SECTION 16: Other information**

# Phrase meaning

Aquatic Chronic 2 - Hazardous to the aquatic environment — Chronic hazard category 2

Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4

Acute Tox. 4 - inhalation - Acute toxicity, inhalation, hazard category 4

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.