


Potassium Hexafluoroantimonate(V)		Pricing >
Linear Formula	KSbF ₆	
Pubchem CID	16688490	
MDL Number	MFCD00043080	
EC No.	N/A	
IUPAC Name	potassium; hexafluoroantimony(1-)	
Beilstein/Reaxys No.	N/A	
SMILES	[K+].F[Sb-](F)(F)(F)(F)F	
Inchl Identifier	InChI=1S/6FH.K.Sb/h6*1H;;/q;++++;+1;+5/p-6	
Inchl Key	LQKKGPUEJBHVHZ-UHFFFAOYSA-H	
Signal Word	Warning	
Hazard Statements	H302+H332	
Hazard Codes	Xi	
Precautionary Statements	P261-P264-P301+P312-P304+P340-P312-P501	
Risk Codes	N/A	
Safety Statements	N/A	
Transport Information	UN1549 6.1/ PG III	
GHS Pictograms	GHS07 Exclamation Point 	

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SAFETY DATA SHEET

Date Accessed: 04/28/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #16893-92-8

Relevant identified uses of the substance:
Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.

Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
Domestic, North America +1 800-424-9300
International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture in
accordance with 29 CFR 1910 (OSHA HCS)

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Hazards not otherwise classified

No information known.

Label elements

GHS label elements

The product is classified and labeled in accordance
with 29 CFR 1910 (OSHA HCS)

Hazard pictograms



Signal word

Warning

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

Precautionary statements

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P264

Wash thoroughly after handling.

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

P301+P312 IF SWALLOWED: Call a POISON
CENTER/doctor/.../if you feel unwell.

P312

Call a POISON CENTER/doctor/.../if you feel unwell.

P501

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

WHMIS classification

D1B - Toxic material causing immediate and serious
toxic effects

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) = 3

Flammability = 0

Physical Hazard = 0

Other hazards
Results of PBT and vPvB assessment
PBT:
Not applicable.
vPvB:
Not applicable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Substances
CAS# Description:
16893-92-8 Potassium hexafluoroantimonate
Identification number(s):
Index number:
051-003-00-9

SECTION 4. FIRST AID MEASURES

Description of first aid measures
After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.
After skin contact
Immediately wash with water and soap and rinse thoroughly.
Rub in calcium gluconate solution or calcium gluconate gel immediately.
Seek immediate medical advice.
After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing
Seek medical treatment.
Information for doctor
Most important symptoms and effects, both acute and delayed
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents
Product is not flammable. Use fire-fighting measures that suit the surrounding fire.
Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Hydrogen fluoride (HF)

Toxic metal compounds

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:

Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation.

Prevention of secondary hazards:

No special measures required.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

The product is not flammable

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Specific end use(s)
No further relevant information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

Antimony and antimony compounds

mg/m³

ACGIH TLV 0.5

Austria MAK 0.5

Belgium TWA 0.5

Denmark TWA 0.5

Finland TWA 0.5

France VME 0.5

Germany MAK 0.5 (total dust)

Hungary TWA 0.5-STEL

Japan OEL 0.1; 2B Carcinogen

Korea TLV 0.5

Netherlands MAC-TGG 0.5

Norway TWA 0.5

Poland TWA 0.5; 1.5-STEL

Russia TWA 0.2; 0.5-STEL

Sweden NGV 0.5

Switzerland MAK-W 0.5

United Nations TWA 0.5

USA PEL 0.5

Fluorides (as F)

mg/m³

ACGIH TLV 2.5

Austria MAK 2.5

Belgium TWA 2.5

Finland TWA 2.5

France TWA 2.5

Germany MAK 2.5

Hungary TWA 1; 2-STEL

Netherlands MAC-K 3.5

Norway TWA 0.6

Poland TWA 1; 3-STEL

Sweden NGV 2

Switzerland MAK-W 1.5; 3-KZG-W

United Kingdom TWA 2.5

Russia TWA 2
Denmark TWA 2.5
USA PEL 2.5
Additional information:
No data
Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Maintain an ergonomically appropriate working environment.
Breathing equipment:
Use suitable respirator when high concentrations are present.
Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
Eye protection:
Safety glasses
Body protection:
Protective work clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information

Appearance:

Form:

Powder

Color:

White

Odor:

Odorless

Odor threshold:

Not determined.

pH-value:

Not applicable.

Change in condition

Melting point/Melting range:

846 °C (1555 °F)

Boiling point/Boiling range:

1505 °C (2741 °F)

Sublimation temperature / start:

Not determined
Flash point:
Not applicable
Flammability (solid, gaseous)
Not determined.
Ignition temperature:
Not determined
Decomposition temperature:
Not determined
Auto igniting:
Not determined.
Danger of explosion:
Product does not present an explosion hazard.
Explosion limits:
Lower:
Not determined
Upper:
Not determined
Vapor pressure:
Not applicable.
Density:
Not determined
Relative density
Not determined.
Vapor density
Not applicable.
Evaporation rate
Not applicable.
Solubility in / Miscibility with
Water:
Soluble
Partition coefficient (n-octanol/water):
Not determined.
Viscosity:
dynamic:
Not applicable.
kinematic:
Not applicable.
Other information
No further relevant information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity
No information known.
Chemical stability
Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided:
Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions
No dangerous reactions known
Conditions to avoid

No further relevant information available.

Incompatible materials:

Oxidizing agents

Hazardous decomposition products:

Hydrogen fluoride

Toxic metal compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Harmful if inhaled.

Harmful if swallowed.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

Irritant to skin and mucous membranes.

Eye irritation or corrosion:

Irritating effect.

Sensitization:

No sensitizing effects known.

Germ cell mutagenicity:

No effects known.

Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity:

No effects known.

Specific target organ system toxicity - repeated exposure:

No effects known.

Specific target organ system toxicity - single exposure:

No effects known.

Aspiration hazard:

No effects known.

Subacute to chronic toxicity:

Antimony compounds may cause metallic taste, gastrointestinal disturbances, vomiting, diarrhea, dizziness and systemic poisoning. Chronic exposure may cause liver and kidney damage. Dermatitis and eczematous skin eruptions may result from skin contact.

Fluorides may cause salivation, nausea, vomiting, diarrhea and abdominal pain, followed by weakness, tremors, shallow respiration, convulsions and coma.

May cause brain and kidney damage. Chronic fluoride poisoning can cause severe bone changes, loss of weight, anorexia, anemia and dental defects.

The toxicity of potassium compounds is generally due to the anion.

Subacute to chronic toxicity:
No effects known.
Additional toxicological information:
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity:
No further relevant information available.
Persistence and degradability
No further relevant information available.
Bioaccumulative potential
No further relevant information available.
Mobility in soil
No further relevant information available.
Ecotoxicological effects:
Remark:
Toxic for aquatic organisms
Additional ecological information:
General notes:
Do not allow material to be released to the environment without proper governmental permits.
Toxic for aquatic organisms
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic to aquatic life.
May cause long lasting harmful effects to aquatic life.
Avoid transfer into the environment.
Results of PBT and vPvB assessment
PBT:
Not applicable.
vPvB:
Not applicable.
Other adverse effects
No further relevant information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation
Consult state, local or national regulations to ensure proper disposal.
Uncleaned packagings:
Recommendation:
Disposal must be made according to official

regulations.
Recommended cleansing agent:
Water, if necessary with cleansing agents.

SECTION 14. TRANSPORT INFORMATION

UN-Number
DOT, IMDG, IATA
UN1549
UN proper shipping name
DOT
Antimony compounds, inorganic, solid, n.o.s.
(Potassium hexafluoroantimonate)
IMDG, IATA
ANTIMONY COMPOUND, INORGANIC, SOLID,
N.O.S. (Potassium
hexafluoroantimonate)
Transport hazard class(es)
DOT
Class
6.1 Toxic substances.
Label
6.1
Class
6.1 (T5) Toxic substances
Label
6.1
IMDG, IATA
Class
6.1 Toxic substances.
Label
6.1
Packing group
DOT, IMDG, IATA
III
Environmental hazards:
Environmentally hazardous substance, solid
Special precautions for user
Warning: Toxic substances
Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code
Not applicable.
Transport/Additional information:
DOT
Marine Pollutant (DOT):
No
UN "Model Regulation":
UN1549, Antimony compounds, inorganic, solid,
n.o.s. (Potassiumhexafluoroantimonate), 6.1, III

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS label elements

The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms

GHS07

Signal word

Warning

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

Precautionary statements

P261

Avoid breathing dust/fume/gas/mist/vapors/spray.

P264

Wash thoroughly after handling.

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

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell.

P312

Call a POISON CENTER/doctor/.../if you feel unwell.

P501

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

National regulations

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

SARA Section 313 (specific toxic chemical listings)

16893-92-8 Potassium hexafluoroantimonate

California Proposition 65

Prop 65 - Chemicals known to cause cancer

Substance is not listed.

Prop 65 - Developmental toxicity

Substance is not listed.

Prop 65 - Developmental toxicity, female

Substance is not listed.

Prop 65 - Developmental toxicity, male

Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

This product contains antimony and is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to know

Act of 1986 and 40CFR372.
Other regulations, limitations and prohibitive regulations
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.
Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Substance is not listed.
Annex XIV of the REACH Regulations (requiring Authorization for use)
Substance is not listed.
Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.
