

<a href="#">Potassium Heptafluorotantalate</a>		<a href="#">Pricing &gt;</a>
Linear Formula	K <sub>2</sub> TaF <sub>7</sub>	
Pubchem CID	28146	
MDL Number	MFCD00042369	
EC No.	240-986-1	
IUPAC Name	dipotassium; heptafluorotantalum(2-)	
Beilstein/Reaxys No.	N/A	
SMILES	F[Ta-2](F)(F)(F)(F)(F)F.[K+].[K+]	
Inchl Identifier	InChI=1S/7FH.2K.Ta/h7*1H;;;/q;;;;;;;;;2*+1;+5/p-7	
Inchl Key	DPXAUKPQZOAHGF-UHFFFAOYSA-G	
Signal Word	Danger	
Hazard Statements	H301-H331	
Hazard Codes	N/A	
Risk Codes	N/A	
Safety Statements	N/A	
RTECS Number	TT1225000	
Transport Information	UN 3288 6.1 / PGIII	
WGK Germany	1	

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## SAFETY DATA SHEET

Date Accessed: 05/04/2024

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### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #16924-00-8

**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

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## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
GHS06 Skull and crossbones  
Acute Tox. 3 H301 Toxic if swallowed.  
GHS07  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.  
Classification according to Directive 67/548/EEC or Directive 1999/45/EC  
T; Toxic  
R25: Toxic if swallowed.  
Xi; Irritant  
R36/37/38: Irritating to eyes, respiratory system and skin.  
Information concerning particular hazards for human and environment:  
N/A  
Hazards not otherwise classified  
No data available  
Label elements  
Labelling according to Regulation (EC) No 1272/2008  
The substance is classified and labeled according to the CLP regulation.  
Hazard pictograms



GHS06  
Signal word  
Danger  
Hazard statements  
H301 Toxic if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
Precautionary statements  
P261 Avoid breathing  
dust/fume/gas/mist/vapors/spray.  
P280 Wear protective gloves/protective clothing/eye  
protection/face protection.  
P301+P310 IF SWALLOWED: Immediately call a  
POISON CENTER/ doctor/...  
P305+P351+P338 IF IN EYES: Rinse cautiously with  
water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance  
with local/regional/  
national/international regulations.  
WHMIS classification  
D1A - Very toxic material causing immediate and  
serious toxic effects  
D2B - Toxic material causing other toxic effects  
Classification system  
HMIS ratings (scale 0-4)  
(Hazardous Materials Identification System)  
HEALTH  
FIRE  
REACTIVITY  
2  
0  
1  
Health (acute effects) = 2  
Flammability = 0  
Physical Hazard = 1  
Other hazards  
Results of PBT and vPvB assessment  
PBT:  
N/A  
vPvB:  
N/A

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

Substances  
CAS No. / Substance Name:  
16924-00-8 Potassium heptafluorotantalate (V)  
Identification number(s):  
EC number:  
240-986-1

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

Description of first aid measures  
General information  
Immediately remove any clothing soiled by the  
product.  
In case of irregular breathing or respiratory arrest  
provide artificial respiration.  
If inhaled:  
Supply patient with fresh air. If not breathing, provide  
artificial respiration. Keep patient warm.  
Seek immediate medical advice.  
In case of skin contact:

Immediately wash with soap and water; rinse thoroughly.

Rub in calcium gluconate solution or calcium gluconate gel immediately.

Seek immediate medical advice.

In case of eye contact:

Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Do not induce vomiting; immediately call for medical help.

Information for doctor

Most important symptoms and effects, both acute and delayed

No data available

Indication of any immediate medical attention and special treatment needed

No data available

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## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.

Special hazards arising from the substance or mixture

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

Hydrogen fluoride (HF)

Metal oxide fume

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

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

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Environmental precautions:

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

Do not allow product to enter drains, sewage systems, or other water courses.

Do not allow material to penetrate the ground or soil.

Methods and materials for containment and cleanup:

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.

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## **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:  
No data available  
Conditions for safe storage, including any incompatibilities  
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 data available

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## **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:  
Fluorides (as F)  
mg/m<sup>3</sup>  
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  
Follow typical protective and hygienic practices for handling chemicals.  
Keep away from foodstuffs, beverages and feed.  
Remove all soiled and contaminated clothing immediately.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Maintain an ergonomically appropriate working environment.  
Breathing equipment:  
Use suitable respirator when high concentrations are present.  
Protection of hands:  
Impervious gloves  
Inspect gloves prior to use.  
Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer.  
Eye protection:  
Safety glasses  
Body protection:  
Protective work clothing

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

Information on basic physical and chemical properties

Appearance:

Form: Powder or crystalline solid

Color: White

Odor: No data available

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 730-775 °C (1346-1427 °F)

Boiling point/Boiling range: 790 °C (1454 °F) ((dec))

Sublimation temperature / start: No data available

Flash point: N/A  
Flammability (solid, gas)  
No data available.  
Ignition temperature: No data available  
Decomposition temperature: No data available  
Autoignition: No data available.  
Danger of explosion: Product does not present an explosion hazard.  
Explosion limits:  
Lower: No data available  
Upper: No data available  
Vapor pressure: N/A  
  
Density at 20 °C (68 °F): 4.56 g/cm<sup>3</sup> (38.053 lbs/gal)  
Relative density  
No data available.  
Vapor density  
N/A  
Evaporation rate  
N/A  
Solubility in Water (H<sub>2</sub>O): No data available  
Partition coefficient (n-octanol/water): No data available.  
Viscosity:  
Dynamic: N/A  
Kinematic: N/A  
Other information  
No data available

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

Reactivity  
No data available  
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 data available  
Incompatible materials:  
Oxidizing agents  
Hazardous decomposition products:  
Hydrogen fluoride  
Metal oxide fume

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects

Acute toxicity:  
Fatal if swallowed.  
LD/LC50 values that are relevant for classification:  
Oral LD50 110 mg/kg (mouse)  
2500 mg/kg (rat)  
Skin irritation or corrosion:  
Causes skin irritation.  
Eye irritation or corrosion:  
Causes serious eye irritation.  
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:  
May cause respiratory irritation.  
Aspiration hazard:  
No effects known  
Subacute to chronic toxicity:  
Tantalum compounds may cause skin and eye irritation.  
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.  
Subacute to chronic toxicity:  
The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:  
Behavioral - convulsions or effect on seizure threshold.  
Behavioral - muscle weakness.  
Behavioral - muscle contraction or spasticity.  
Additional toxicological information:  
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

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## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity  
Aquatic toxicity:  
No data available



Persistence and degradability  
No data available  
Bioaccumulative potential  
No data available  
Mobility in soil  
No data available  
Additional ecological information:  
Do not allow material to be released to the environment without official permits.  
Do not allow undiluted product or large quantities to reach groundwater, water courses, or sewage systems.  
Avoid transfer into the environment.  
Results of PBT and vPvB assessment  
PBT:  
N/A  
vPvB:  
N/A  
Other adverse effects  
No data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

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

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## **SECTION 14. TRANSPORT INFORMATION**

UN-Number  
DOT, IMDG, IATA  
UN3288  
UN proper shipping name  
DOT  
Toxic solid, inorganic, n.o.s. (Potassium heptafluorotantalate (V))  
IMDG, IATA  
TOXIC SOLID, INORGANIC, N.O.S. (Potassium heptafluorotantalate (V))  
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:  
N/A  
Special precautions for user  
Warning: Toxic substances  
Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code  
N/A  
Transport/Additional information:  
DOT  
Marine Pollutant (DOT):  
No  
UN "Model Regulation":  
UN3288, Toxic solid, inorganic, n.o.s. (Potassium  
heptafluorotantalate (V)), 6.1, III

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## **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental  
regulations/legislation specific for the substance or  
mixture  
National regulations  
All components of this product are listed in the U.S.  
Environmental Protection Agency Toxic Substances  
Control Act Chemical substance Inventory.  
SARA Section 313 (specific toxic chemical listings)  
Substance is not listed.  
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.  
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  
Authorisation for use)  
Substance is not listed.  
REACH - Pre-registered substances  
Substance is listed  
Chemical safety assessment:  
A Chemical Safety Assessment has not been carried  
out.

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## **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  
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