



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Potassium

---

1. Product and Company Identification

---

Trade Name:	Potassium
Chemical Formula:	K
Recommended Use:	Scientific research and development
Manufacturer/Supplier:	LTS Research Laboratories, Inc.
Street:	37 Ramland Road
City:	Orangeburg
State:	New York
Zip Code:	10962
Country:	USA
Tel #:	855-587-2436 / 855-lts-chem
24-Hour Emergency Contact:	800-424-9300 (US & Canada) +1-703-527-3887 (International)



---

## 2. Hazards Identification

---

Signal Word:

Danger



Hazard Statements:

H260: In contact with water releases flammable gases which may ignite spontaneously.

H314: Causes severe skin burns and eye damage.

Precautionary Statements:

P223: Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231+P232: Handle under inert gas. Protect from moisture.

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P264: Wash skin thoroughly after handling.

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

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P335+P334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

P363: Wash contaminated clothing before reuse.

P370+P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P402+P404: Store in a dry place. Store in a closed container.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

HMIS Health Ratings (0-4):

Health: 3

Flammability: 3

Physical: 3

---

## 3. Composition

---

Chemical Family:

Alkali Metal

Additional Names:

N/A

Potassium (K):

Percentage: 100 wt%

CAS #: 7440-09-7

EC #: 231-119-8

---

#### 4. First Aid Procedures

---

General Treatment:	Seek medical attention if symptoms persist. Remove contaminated clothing immediately.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek immediate medical advice.
Ingestion:	Do NOT induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical advice.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek immediate medical advice.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing while transfer to hospital.

---

#### 5. Firefighting Measures

---

Flammability:	Flammable
Extinguishing Media: Spec. Fire Fighting Procedure:	Do not use water for metal fires – use CO <sub>2</sub> , sand, extinguishing powder. Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

---

#### 6. Accidental Release Measures

---

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust. Use neutralizing agent. Do not flush with water or aqueous cleansing agents.
Environmental Precautions:	Keep away from ignition sources. Isolate runoff to prevent environmental pollution.

---

#### 7. Handling and Storage

---

Handling Conditions: Storage Conditions:	Handle under dry protective gas. Wash thoroughly after handling. Store under dry inert gas. Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

---

## 8. Exposure Controls and Personal Protection

---

Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Respiratory Protection:	Dust Respirator
Protective Gloves:	Nitrile rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

---

## 9. Physical and Chemical Characteristics

---

Color	Silver-grey
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Reacts violently – Contact with water releases flammable gas.
Boiling Point:	760 °C
Melting Point:	63.7 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	0.86 g/cc
Molecular weight:	39.098 g/mol

---

## 10. Reactivity

---

Stability:	Stable under recommended storage conditions. In contact with water releases flammable gases which may ignite spontaneously
Reacts With:	Water, oxidizing agents, carbon oxides
Incompatible Conditions:	Water/moisture (reacts violently)
Hazardous Decomposition Products:	Metal oxide fume, Potassium Oxides

---

## 11. Toxicological Information

---

Potential Health Effects:	
Eyes:	Causes serious eye damage.
Skin:	Causes severe skin burns.
Ingestion:	Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
Inhalation:	May cause irritation
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	700 mg/kg (Intraperitoneal-mouse)
Carcinogen:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Additional Information: OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
RTECS: TS6460000- Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

---

#### 12. Ecological Information

---

Aquatic Toxicity: N/A  
Persistent Bioaccumulation Toxicity: N/A  
Very Persistent, Very Bioaccumulative: N/A  
Notes: Do not allow material to be released to the environment without proper governmental permits.  
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.  
Avoid transfer into the environment.

---

#### 13. Disposal Considerations

---

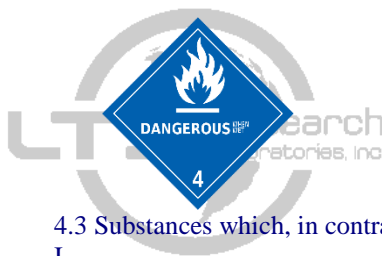
Dispose of in accordance with local, state, national, and international regulations.

---

#### 14. Transportation Data

---

Hazardous: Hazardous for transportation



Hazard Class: 4.3 Substances which, in contact with water, emit flammable gases.  
Packing Group: I  
UN Number: UN2257  
Proper Shipping Name: Potassium

---

#### 15. Regulatory Information

---

Sec 302 Extremely Hazardous: N/A  
Sec 304 Reportable Quantities: N/A  
Sec 313 Toxic Chemicals: No

---

#### 16. Other Information

---

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised: 02/22/2018