

# SAFETY DATA SHEET

## SECTION 1: PRODUCT IDENTIFICATION

<b>PRODUCT NAME</b>	POTASSIUM CHLORIDE, USP
<b>PRODUCT CODE</b>	C6321
<b>SUPPLIER</b>	<b>Lab Alley LLC</b> 22111 Highway 71 West, Suite 601 Spicewood, Texas 78669 Tel.: 512-668-9918
<b>EMERGENCY PHONE</b>	InfoTrac: 800-535-5053
<b>USES</b>	Electrolyte; Tonicity agent.

## SECTION 2: HAZARDS IDENTIFICATION

<b>GHS CLASSIFICATION</b>	Eye Irritation (Category 2B) Acute Toxicity - Oral (Category 5)		
<b>PICTOGRAM</b>	Not Applicable		
<b>SIGNAL WORD</b>	Warning		
<b>HAZARD STATEMENT(S)</b>	Causes eye irritation. May be harmful if swallowed.		
<b>AUSTRALIA-ONLY HAZARDS</b>	Not applicable		
<b>PRECAUTIONARY STATEMENT(S)</b>	<b>Prevention</b>	Wash thoroughly after handling.	
	<b>Response</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF EYE IRRITATION PERSISTS: Get medical advice/attention.	
	<b>Storage</b>	Not applicable	
	<b>Disposal</b>	Not applicable	
<b>HMIS CLASSIFICATION</b>	<b>Health Hazard</b>	1	<b>Flammability</b> 0
	<b>Reactivity</b>	0	<b>Personal Protection</b> E

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<b>CHEMICAL NAME</b>	Potassium Chloride
<b>BOTANICAL NAME</b>	Not applicable
<b>SYNONYM</b>	Not applicable

<b>CHEMICAL FORMULA</b>	KCl						
<b>CAS NUMBER</b>	7447-40-7						
<b>ALTERNATE CAS NUMBER</b>	Not applicable						
<b>MOLECULAR WEIGHT</b>	74.551						
<b>COMPOSITION</b>	<table border="1"> <thead> <tr> <th>CHEMICAL NAME</th> <th>CAS NUMBER</th> <th>% BY WEIGHT</th> </tr> </thead> <tbody> <tr> <td>POTASSIUM CHLORIDE</td> <td>7447-40-7</td> <td>100</td> </tr> </tbody> </table>	CHEMICAL NAME	CAS NUMBER	% BY WEIGHT	POTASSIUM CHLORIDE	7447-40-7	100
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POTASSIUM CHLORIDE	7447-40-7	100					
<b>NOTES</b>	<p>There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as health hazards and hence require reporting in this section.</p> <p>Equivalence. Each g of potassium chloride represents about 13.4 mmol of potassium. Potassium chloride 1.91 g is equivalent to about 1 g of potassium.</p>						

## SECTION 4: FIRST-AID MEASURES

<b>IN CASE OF EYE CONTACT</b>	Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.
<b>IN CASE OF SKIN CONTACT</b>	Wash with soap & water for 15 minutes. If irritation persists seek medical aid.
<b>IF SWALLOWED</b>	Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.
<b>IF INHALED</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
<b>SYMPTOMS AND EFFECTS</b>	Not expected to present a significant hazard under anticipated conditions of normal use.

## SECTION 5: FIREFIGHTING MEASURES

<b>SPECIFIC HAZARDS ARISING FROM THE CHEMICAL</b>	Not applicable
<b>FLAMMABLE PROPERTIES</b>	May be combustible at high temperature
<b>HAZARDOUS COMBUSTION PRODUCTS</b>	Under fire conditions, hazardous fumes will be present.
<b>EXTINGUISHING MEDIA</b>	<b>Small fire:</b> dry chemical, CO <sub>2</sub> or water spray. <b>Large fire:</b> dry chemical, CO <sub>2</sub> , alcohol resistant foam or water spray. Do not get water inside containers.
<b>PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>PERSONAL PRECAUTIONS</b>	Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
<b>METHODS &amp; MATERIAL FOR CONTAINMENT</b>	On land, sweep or shovel into suitable containers. Minimize generation of dust.
<b>CLEANUP PROCEDURE</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

## SECTION 7: HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

### STORAGE CONDITIONS

Store in original container, tightly sealed container, protected from direct sunlight, in a dry, and well-ventilated area, away from incompatible materials. Store in accordance with local regulations. Eliminate all ignition sources. Separate from oxidizing materials. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Preserve in well-closed containers.

## SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name: POTASSIUM CHLORIDE CAS #: 7447-40-7

	TWA	Ceiling	STEL	REL	IDLH	Remarks
OSHA PEL	N/L	N/L	-	-	-	-
ACGIH TLV	N/L	N/L	N/L	-	-	-
NIOSH	N/L	N/L	N/L	N/L	N/L	-
AIHA WEEL	N/L	N/L	N/L	-	-	-
Safe Work Australia HSIS	N/L	N/L	N/L	-	-	-
HSE	N/L	N/L	N/L	-	-	-

N/L = Not Listed

### EXPOSURE GUIDELINES

Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction: 5 mg/m3.

### PERSONAL PROTECTIVE EQUIPMENT

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. **Skin:** Wear appropriate gloves to prevent skin exposure. **Clothing:** Wear appropriate protective clothing to minimize contact with skin. **Respirators:** Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### SPECIFIC ENGINEERING CONTROLS

Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### PHYSICAL STATE

Solid

### DESCRIPTION

Colorless, elongated, prismatic, or cubical crystals, or white, granular powder. Is odorless.

### SOLUBILITY

Freely soluble in water and even more soluble in boiling water; slightly soluble in alcohol. Insoluble in ether and acetone.

### ODOR

Odorless

### FLAMMABILITY

May be combustible at high temperature

### ODOR THRESHOLD

Not available

### pH

~ 7 (15 °C)

### MELTING POINT

(770-773)°C,  
(1418-1423,4)°F

### BOILING POINT

1500 °C, 2732 °F  
(sublimes)

### FREEZING POINT

(770-773)°C,  
(1418-1423,4)°F

### FLASH POINT

Not available

<b>SPECIFIC GRAVITY</b>	1.987	<b>EVAPORATION RATE</b>	Not available	<b>EXPLOSIVE LIMIT</b>	Not available
<b>UPPER FLAMMABLE/ EXPLOSIVE LIMIT(S)</b>	Not available	<b>LOWER FLAMMABLE/ EXPLOSIVE LIMIT(S)</b>	Not available	<b>VAPOR PRESSURE</b>	< 0.0000001 kPa @ 25 °C
<b>VAPOR DENSITY (AIR = 1)</b>	Not available	<b>RELATIVE DENSITY (WATER = 1)</b>	Not available	<b>log P (OCTANOL-WATER)</b>	Not available
<b>AUTO-IGNITION TEMPERATURE</b>	Not available	<b>DECOMPOSITION TEMPERATURE</b>	Not available	<b>VISCOSITY</b>	Not available

## SECTION 10: STABILITY AND REACTIVITY

<b>REACTIVITY</b>	Not established
<b>STABILITY</b>	Stable under recommended storage conditions
<b>MATERIALS TO AVOID</b>	Strong oxidants, Lithium, Bromine trifluoride.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and other gases may occur
<b>HAZARDOUS POLYMERIZATION</b>	Will not occur
<b>POSSIBILITY OF HAZARDOUS REACTION</b>	Not established
<b>CONDITIONS TO AVOID</b>	Moisture, sunlight and extreme temperatures

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>ACUTE TOXICITY</b>	Oral: Rat: LD50: (mg/kg): 2600 Dermal: Rabbit: LD50: (mg/kg): Not available Inhalation: Rat: LD50: (mg /L/4hr): Not available
<b>SKIN CORROSION/IRRITATION</b>	Due to lack of data the classification is not possible.
<b>SERIOUS EYE DAMAGE/EYE IRRITATION</b>	Causes eye irritation. Eye irritancy test: Rabbit: Mild irritation
<b>RESPIRATORY OR SKIN SENSITIZATION</b>	Due to lack of data the classification is not possible.
<b>GERM CELL MUTAGENICITY</b>	Based on available data, the classification criteria are not met. High concentrations of potassium chloride showed positive results in a range of genotoxic screening assays using mammalian cells in culture. The action of potassium chloride in culture seems to be an indirect effect without relevance in the intact body.
<b>CARCINOGENICITY</b>	<b>OSHA</b> POTASSIUM CHLORIDE is not listed. <b>NTP</b> POTASSIUM CHLORIDE is not listed. <b>IARC</b> POTASSIUM CHLORIDE is not evaluated. <b>California Proposition 65</b> This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**ADDITIONAL CARCINOGENICITY INFORMATION**

Based on available data, the classification criteria are not met:  
1820 mg/kg/day Long-term carcinogenicity study, administered in diet  
Result: Negative  
Species: Rat  
Test Duration: 2 years

**REPRODUCTIVE TOXICITY**

Based on available data, the classification criteria are not met:  
235 mg/kg/day Developmental study  
Result: No fetotoxic or teratogenic effects  
Species: Mouse  
310 mg/kg/day Developmental study  
Result: No fetotoxic or teratogenic effects  
Species: Rat

**SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE**

Due to lack of data the classification is not possible.

**SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE**

Due to lack of data the classification is not possible.

**ASPIRATION HAZARDS**

Due to lack of data the classification is not possible.

**SIGNS AND SYMPTOMS OF EXPOSURE**

Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms related to the physical, chemical, and toxicological characteristics:  
Nausea. Vomiting. Diarrhea. Stomach pain. Gas. Dizziness. Confusion. Anxiety. Fast heartbeat. Irregular heartbeat. Numbness, pain, tingling, or weakness in hands or feet. Shortness of breath. Tiredness. Weakness. Muscle pain. Heaviness of legs. Paralysis.

Delayed and immediate effects of exposure:  
Hyperkalemia. Low blood pressure. Heart block.

Medical conditions aggravated by exposure:  
Sickle cell or related anemias. Heart problems. Impaired kidney function. Adrenal insufficiency. Metabolic acidosis. Respiratory acidosis. Dehydration. Gastrointestinal constrictions. Familial periodic paralysis. Hyperkalemia. Diabetes. Heat cramps.

**POTENTIAL HEALTH EFFECTS**

<b>Inhalation</b>	May be harmful if inhaled. May cause irritation to mucous membranes and respiratory tract.
<b>Ingestion</b>	May be harmful if swallowed. Causes diarrhea, nausea, vomiting, weakness, convulsions.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation
<b>Eyes</b>	Causes eye irritation. Redness, pain.

## SECTION 12: ECOLOGICAL INFORMATION

**TOXICITY**

EC50: 48 Hr: Daphnia magna: (mg/L): Not available  
LC50: 96 Hr: Freshwater fish: (mg/L): Not available  
IC50: 72 Hr: Algae: (mg): Not available

**PERSISTENCE AND DEGRADABILITY**

Not available

**BIOACCUMULATIVE POTENTIAL**

Will not bio-accumulate.

**MOBILITY IN SOIL**

Soluble in water (34g/100 mL (20 °C))

**OTHER ADVERSE EFFECTS**

Not available

This product is not intended to be released into the environment

## SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL**

Dispose of in accordance with federal / local laws and regulations. Avoid release into the environment.

## SECTION 14: TRANSPORT INFORMATION

### UNITED STATES & CANADA

UN PROPER SHIPPING NAME	Not dangerous good
UN NUMBER	Not applicable
CLASS	Not applicable
PACKING GROUP	Not applicable

### AUSTRALIA

UN PROPER SHIPPING NAME	Not dangerous good
UN NUMBER	Not applicable
CLASS	Not applicable
PACKING GROUP	Not applicable
HAZCHEM	Not Applicable

ENVIRONMENTAL HAZARDS Not available

SPECIAL SHIPPING INFORMATION Not applicable

## SECTION 15: REGULATORY INFORMATION

Chemical Name & CAS	CERCLA 40 CFR Part 302.4	SARA (Title III) 40 CFR Part 372.65	EPA 40 CFR Part 355		Pennsylvania	Right-to-know		California Prop 65
			Appendix A	Appendix B		New Jersey	Massachusetts	
POTASSIUM CHLORIDE 7447-40-7	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed; X = Listed

### AUSTRALIAN REGULATIONS

Chemical Name & CAS	Poisons and Therapeutic Goods Regulation	Therapeutic Goods Act	Code of Practices - Illicit Drug Precursors
POTASSIUM CHLORIDE 7447-40-7	N/L	N/L	N/L

## SECTION 16: OTHER INFORMATION

REFERENCES Available upon request

## ABBREVIATIONS AND ACRONYMS

**CAS** – Chemical Abstract Service; **GHS** – Global Harmonized System; **OSHA PEL** – Occupational Safety & Health Administration Permissible Exposure Limits; **TWA** – Time Weighted Average; **HSIS** – Hazardous Substances Information System; **STEL** – Short Term Exposure Limit; **AIHA WEEL** – American Industrial Hygiene Association Workplace Environment Exposure Levels; **LD50** – Lethal Dose, 50%; **IARC** – International Agency for Research on Cancer; **NTP** – National Toxicology Program; **WHMIS** – Workplace Hazardous Materials Information System; **SARA** – Superfund Amendments and Reauthorization Act; **EPA** – Environmental Protection Agency; **CERCLA** – Comprehensive Environmental Response, Compensation, and Liability Act; **HMIS** – Hazardous Materials Information System; **NIOSH** – National Institute for Occupational Safety and Health; **MSHA** - Mine Safety and Health Administration; **ACGIH** - American Conference of Governmental Industrial Hygienists; **IDHL** - Immediately Dangerous to Health or Life; **TLV** – Threshold Limit Value; **HSE** – Health and Safety Executive; **REL** - Recommended Exposure Limit

## LAST REVISION

03/2016

## SUPERSEDES

06/2013

## DISCLAIMER

This document was created in accordance with OSHA, Safe Work Australia and WHMIS regulations. 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. Lab Alley shall not be held liable for any damage resulting from handling or from contact with the above product. Recipients of the product must take responsibility for observing existing laws and regulations.