

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **Potassium Chloride, Enriched Potassium**  
Chemical Formula KCl  
Molecular Weight 74.55  
CAS No. 7447-40-7  
Synonym(s) Potassium monochloride  
Supplier Address\* ISOFLEX USA  
PO Box 29475  
San Francisco CA 94129  
United States  
Telephone +1 415-440-4433  
Fax +1 415-563-4433  
Emergency Phone Number Infotrac/ +1 800-535-5053  
(both supplier and manufacturer) \*May include subsidiaries or affiliate companies/divisions  
Email [iusa@isoflex.com](mailto:iusa@isoflex.com)  
Website [www.isoflex.com](http://www.isoflex.com)  
Preparation Information ISOFLEX USA  
Product Safety  
+1 415-440-4433

## 2. HAZARDS IDENTIFICATION

### Emergency Overview:

Caution! May be harmful if swallowed. May cause irritation to skin, eyes and respiratory tract.

**NFPA Ratings:** (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

**Health Hazard = 1      Flammability = 0      Reactivity = 0**



**HMIS Ratings:** (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

**Health Hazard = 1      Flammability = 0      Physical Hazard = 0**

HEALTH HAZARD	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	A

Lab Protective Equipment  
Storage Color Code

Goggles; Lab Coat; Vent Hood; Proper Gloves  
Green (General Storage)

### Potential Health Effects

<i>Inhalation</i>	Inhalation of high concentrations of dust may cause nasal or lung irritation.
<i>Ingestion</i>	Large quantities can produce gastrointestinal irritation and vomiting. May produce weakness and circulatory problems. May affect heart. In severe cases, ingestion may be fatal.
<i>Skin Contact</i>	Contact may cause irritation or rash, particularly with moist skin.
<i>Eye Contact</i>	Potassium chloride is a moderate eye irritant. Redness, tearing, possible abrasion can occur.
<i>Chronic Exposure</i>	No information found
<i>Aggravation of Pre-existing Conditions</i>	Persons with impaired kidney function may be more susceptible to the effects of the substance.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:	Potassium Chloride
CAS No.	7447-40-7
Chemical Formula:	KCl
Molecular Weight:	74.55

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### 4. FIRST AID MEASURES

<i>Inhalation Exposure</i>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
<i>Oral Exposure</i>	Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.
<i>Dermal Exposure</i>	Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.
<i>Eye Exposure</i>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician if irritation persists.

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### 5. FIREFIGHTING MEASURES

<i>Fire</i>	Not considered a fire hazard
<i>Explosion</i>	Not considered an explosion hazard
<i>Suitable Extinguishing Media</i>	Use any means suitable for extinguishing surrounding fire.

#### Firefighting

<i>Protective Equipment</i>	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure-demand or other positive-pressure mode.
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## 6. ACCIDENTAL RELEASE MEASURES

<i>Personal Precautions</i>	Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.
<i>Environmental Precautions</i>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<i>Methods for Cleaning Up</i>	Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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## 7. HANDLING AND STORAGE

<i>Handling</i>	Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
<i>Storage</i>	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<i>Airborne Exposure Limits</i>	None established
<i>Ventilation System</i>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document <i>Industrial Ventilation, A Manual of Recommended Practices</i> , most recent edition, for details.
<b>Personal Protective Equipment</b>	
<i>Personal Respirators (NIOSH-Approved)</i>	For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
<i>Hand Protection</i>	Wear protective gloves.
<i>Body Protection</i>	Wear clean body-covering clothing.
<i>Eye Protection</i>	Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	White crystals or powder
Odor	Odorless

**Safety Data**

Solubility:	28.1 g/100g of water @ 0 °C	Melting Point:	772 °C (1422 °F)
Density:	1.987	Vapor Density:	No information found
pH:	ca. 7 Saturated aq. sl. @ 15 °C	Vapor Pressure:	No information found
% Volatiles:	0, @ 21 °C (70 °F)	Evaporation Rate:	No information found
Boiling Point:	1500 °C (2732 °F) Sublimes		

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**10. STABILITY AND REACTIVITY**

<i>Stability</i>	Stable under ordinary conditions of use and storage
<i>Hazardous Decomposition Products</i>	Oxides of the contained metal and halogen, possibly also free, or ionic halogen
<i>Hazardous Polymerization</i>	Will not occur
<i>Incompatible Materials</i>	Bromine trifluoride; potassium permanganate plus sulfuric acid
<i>Conditions to Avoid</i>	No information found

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**11. TOXICOLOGICAL INFORMATION**

<i>Oral LD50 (Rat)</i>	2600 mg/kg
<i>Irritation Eye Rabbit (Standard Draize)</i>	500 mg/24 hr mild; investigated as a mutagen
<i>Skin Corrosion/Irritation</i>	No data available
<i>Serious Eye Damage/Irritation</i>	No eye irritation
<i>Respiratory or Skin Sensitization</i>	No data available
<i>Germ Cell Mutagenicity</i>	No data available
<b>Carcinogenicity</b>	
<i>IARC</i>	No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.
<i>ACGIH</i>	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.
<i>NTP</i>	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.
<i>OSHA</i>	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.
<i>Reproductive Toxicity</i>	No data available
<i>Specific Target Organ Toxicity / Single Exposure</i>	No data available
<i>Specific Target Organ Toxicity / Repeated Exposure</i>	No data available
<i>Aspiration Hazard</i>	No data available
<i>Additional Information</i>	RTECS: TS8050000

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## 12. ECOLOGICAL INFORMATION

### Toxicity

<i>Toxicity to Fish</i>	LC50 - <i>Pimephales promelas</i> (fathead minnow) - 880 mg/l - 96 h Mortality NOEC - <i>Pimephales promelas</i> (fathead minnow) - 500 mg/l - 7 d Mortality LOEC - <i>Pimephales promelas</i> (fathead minnow) - 1,000 mg/l - 7 d
<i>Toxicity to Daphnia and Other Aquatic Invertebrates</i>	EC50 - <i>Daphnia magna</i> (Water flea) - 83 mg/l - 48 h
<i>Persistence and Degradability</i>	No data available
<i>Bioaccumulative Potential</i>	No data available
<i>Mobility in Soil</i>	No data available
<i>Results of PBT and vPvB Assessment</i>	PBT/vPvB assessment not available, as chemical safety assessment not required/not conducted
<i>Other Adverse Effects</i>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

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## 13. DISPOSAL CONSIDERATIONS

<i>Product</i>	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.
<i>Contaminated Packaging</i>	Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14. TRANSPORT INFORMATION

Not regulated

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## 15. REGULATORY INFORMATION

<b>REACH No.</b>	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
<b>SARA 302 Components</b>	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
<b>SARA 313 Components</b>	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
<b>SARA 311/312 Hazards</b>	Chronic Health Hazard
<b>Massachusetts Right to Know Components</b>	No components are subject to the Massachusetts Right to Know Act.
<b>Pennsylvania Right to Know Components</b>	Potassium chloride / CAS No. 7447-40-7
<b>New Jersey Right to Know Components</b>	Potassium chloride / CAS No. 7447-40-7
<b>California Prop. 65 Components</b>	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

<i>Prepared By</i>	ISOFLEX USA PO Box 29475 San Francisco CA 94129 United States
<i>Issuing Date</i>	January 12, 2014
<i>Revision Date</i>	August 01, 2021
<i>Revision Number</i>	2
<i>Revision Note</i>	Required review and update

### ISOFLEX USA's Commonly Used Abbreviations and Acronyms\*

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
ALARA	As Low As Is Reasonably Achievable
AMU	Atomic Mass Unit
ANSI	American National Standards Institute
BLS	Basic Life Support
CAM	Continuous Air Monitor
CAS	Chemical Abstracts Service (division of the American Chemical Society)
CEN	European Committee for Standardization
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CLP	Classification, Labelling and Packaging (European Union)
CPR	Controlled Products Regulations (Canada)
CWA	Clean Water Act (USA)
DAC	Derived Air Concentration (USA)
DOE	United States Department of Energy (USA)
DOT	United States Department of Transportation (USA)
DSL	Domestic Substances List (Canada)
EC50	Half Maximal Effective Concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
EHS	Environmentally Hazardous Substance
ELINCS	European List of Notified Chemical Substances
EMS	Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA	Environmental Protection Agency (USA)
EPCRA	Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986
GHS	Globally Harmonized System
HMIS	Hazardous Materials Identification System (USA)
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Containers
ICAO	International Civil Aviation Organization
IDLH	Immediately Dangerous to Life or Health
IMDG	International Maritime Code for Dangerous Goods
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent
LDLO	Lethal Dose Low
LOEC	Lowest-Observed-Effective Concentration
MARPOL	International Convention for the Prevention of Pollution from Ships
MSHA	Mine Safety and Health Administration (USA)
NCRP	National Council on Radiation Protection & Measurements (USA)
NDSL	Non-Domestic Substances List (Canada)
NFPA	National Fire Protection Association (USA)



NIOSH	National Institute for Occupational Safety and Health (USA)
NOEC	No Observed Effect Concentration
N.O.S.	Not Otherwise Specified
NRC	Nuclear Regulatory Commission (USA)
NTP	National Toxicology Program (USA)
OSHA	Occupational Safety and Health Administration (USA)
PBT	Persistent Bioaccumulative and Toxic Chemical
PEL	Permissible Exposure Limit
PIH	Poisonous by Inhalation Hazard
RCRA	Resource Conservation and Recovery Act (USA)
RCT	Radiation Control Technician
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Europe)
RID	Regulations Concerning the International Transport of Dangerous Goods by Rail
RTECS	Registry of Toxic Effects of Chemical Substances
SARA	Superfund Amendments and Reauthorization Act (USA)
TDG	Transportation of Dangerous Goods (Canada)
TIH	Toxic by Inhalation Hazard
TLV	Threshold Limit Value
TPQ	Threshold Planning Quantity
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
UN	United Nations (Number)
VOC	Volatile Organic Compound
vPvB	Very Persistent Very Bioaccumulative Chemical
WGK	Wassergefährdungsklassen (Germany: Water Hazard Classes)
WHMIS	Workplace Hazardous Materials Information System

\*One or more of the above-listed items may not appear in this document.

#### **General Disclaimer**

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