

**Potassium Chloride – USP / FCC / ACS / EP / BP / JP****PRODUCT PROFILE****Characteristics**

Potassium Chloride (KCl) is a white crystalline or colorless granular material. It is odorless, stable in air and highly soluble in water. In addition to USP-, FCC-, and ACS- certified grades, we also offer multi-compendia BP, EP, and JP. The product is manufactured for human consumption in an FDA registered, cGMP 21CFR Part 110 and SQF Level 2 manufacturing facility in Midlothian, TX. Special grades include those resistant to caking and separation in blends as well as those for microencapsulation. We also offer customize particle size and morphology, anti-caking agents, packaging and other customer requirements.

**Properties**

Chemical Formula	KCl
Molecular Weight	74.55
Specific Gravity	1.988
Density of saturated, aq. Solution at 15 °C	1.172
Melting Point, °C	773
Bulk Density (typical):	
Loose Pack	65.5 lb/ft <sup>3</sup> (14.6 fl. oz./lb)
Tight Pack	71.0 lb/ft <sup>3</sup> (13.5 fl. oz./lb)
Solubility in Water	1.0 g KCl in 2.6 mL at 20 °C

**Specifications**

	USP / FCC	EP
<b>Identification</b>		
<b>Potassium</b>	Positive	Positive
<b>Chloride</b>	Positive	Positive
<b>Potassium Chloride, Dried Basis</b>	99.0-100.5%	99.0-101.0
<b>Acidity and Alkalinity</b>	Passes USP test	Passes EP test
<i>Maximum Limits of Impurities:</i>		
<b>Loss on drying (2 hrs. @ 105°C), %</b>	1.0	1.0
<b>Aluminum, ppm</b>	1*	1
<b>Sodium, %</b>	Passes USP test	0.1
<b>Iodide, %</b>	0.005	Passes EP test
<b>Bromide, %</b>	0.01	0.1
<b>Calcium and Magnesium</b>	Passes USP test	200 ppm (as Ca) or 5.0 mL of 0.01M Na <sub>2</sub> EDTA
<b>Barium</b>	-	Passes EP test
<b>Heavy Metals, ppm</b>	5	10
<b>Iron, ppm</b>	-	20
<b>Lead (USP 232 &amp; 233)</b>	0.33 ppm**	-
<b>Sulfate, ppm</b>	-	300
<b>Residual Solvents</b>	Passes USP test	-

\*For hemodialysis

\*\*Meets California Proposition 65

**ACS Reagent**

Identification	ACS Reagent
<b>Potassium</b>	Positive
<b>Chloride</b>	Positive
<b>Potassium Chloride, Dried Basis</b>	99.0-100.5%
<b>pH of a 5% Solution</b>	5.4 to 8.6 at 25°C
<i>Maximum Limits of Impurities:</i>	
<b>Chlorate &amp; Nitrate (as NO<sub>3</sub>), %</b>	0.003
<b>Insoluble Matter, %</b>	0.005
<b>Sodium (Na), ppm</b>	50
<b>Iodide (I), %</b>	0.002
<b>Bromide (Br), %</b>	0.01
<b>Calcium (Ca), %</b>	0.002
<b>Magnesium (Mg), %</b>	0.001
<b>Barium (Ba), %</b>	0.001
<b>Heavy Metals (as Pb), ppm</b>	5
<b>Iron (Fe), ppm</b>	3
<b>Phosphate (PO<sub>4</sub>), ppm</b>	5
<b>Sulfate (SO<sub>4</sub>), %</b>	0.001



## Markets & Applications

### Food

- ✚ Sodium substitute in foods
- ✚ Increase potassium intake

### Pharmaceutical

- ✚ Controlled release application
- ✚ Injectable dosage forms
- ✚ Hemodialysis and intravenous solutions
- ✚ Potassium replacement source

### Nutraceutical

- ✚ Potassium source in mineral and nutritional solutions
- ✚ Infant Formula

### Tantalum Refining

- ✚ Separation of Tantalum from Niobium

### General Industry

- ✚ Lab Reagent
- ✚ Photographic emulsions in film
- ✚ Reducing agent of metals and metal plating

## Grades & Forms

- ✚ **Pharma-K™** USP/FCC/BP/EP/JP pharmaceutical and food grade KCl
- ✚ **Nutri-K™** FCC food grade KCl with <1% anti-caking agent
- ✚ **Pure-K™** high purity KCl that meets ACS standards
- ✚ **Custom Grades** for controlled particle size, morphology, and moisture. Morphology includes spherical or cubic crystals.

### SELECT SPECIALTIES SALES

*Sales Inquiries:*

[SelectSpecialty@chemtradelogistics.com](mailto:SelectSpecialty@chemtradelogistics.com)

*To Place Orders:*

(844) 204 9674

[cssorders@chemtradelogistics.com](mailto:cssorders@chemtradelogistics.com)

## Logistics

### PACKAGING OPTIONS

- ✚ 250 lb: fiber drums
- ✚ 110 lb/50 kg: fiber drums (rim-lock/ro-con)
- ✚ 50 lb/25 kg: fiber drums (rim-lock/ro-con), boxes, plastic pails, bags
- ✚ Super sacks
- ✚ Others to meet customer requirements

### MANUFACTURING & SHIPPING LOCATION

ACS, USP, NF / FCC / BP / EP / JP  
Midlothian, TX USA

### CORPORATE HEADQUARTERS

Chemtrade Logistics, Inc.  
155 Gordon Baker Road, Suite 300  
Toronto, Ontario M2H 2N5 Canada

### Shelf Life

Potassium Chloride is stable under normal conditions for five (5) years, as documented in our product stability testing program but will harden with age. Anti-caking agents can aid flow, eliminate hardening and significantly extend shelf life.

### Storage Conditions

Store KCl in closed containers in dry areas free of excess air flow.

### Shipping Regulations

Not Regulated.

### Product Safety Information

As with any chemical, Potassium Chloride requires care in handling. Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the Safety Data Sheet (SDS) for these products or you may contact Chemtrade at 416-496-5856.

In the event of an emergency with these products, call the 24 hour Emergency Number:

*US Only: (CHEMTREC) (800) 424-9300*

*Canada Only: (CANUTEC) (613) 996-6666*