

Comparison of Potassium Salts

US products are prescription unless otherwise indicated. In Canada, oral potassium salts do not require a prescription; however, those with more than 5 mEq (mmol) per single dose are only available from the pharmacist and must be kept behind the counter.¹ To reduce esophagitis with oral potassium, counsel patients to drink at least 125 mL of water and stay upright for at least 30 minutes after administration.² Divide larger daily oral doses (such as more than 20 mEq [mmol]) to reduce the risk of GI problems.³ Also see our chart, *Potassium Content of Foods and Salt Substitutes*.

1 mEq of potassium = 1 mmol of potassium

Potassium Salt/Forms	Example Brands/Strengths ^a	Comments
POTASSIUM CHLORIDE: 750 mg of potassium chloride is equivalent to 10 mEq (mmol) of potassium.		
Wax-matrix tablet, slow-release	Generics: 8 mEq, 10 mEq (US), 20 mEq (US) <i>K-Tab</i> (US): 20 mEq <i>Klor-Con</i> (US): 8 mEq, 10 mEq	<ul style="list-style-type: none"> • Choice for most patients due to effectiveness for most common causes of potassium loss (i.e., diuretic- and diarrhea-induced).³ • Potassium chloride has better GI absorption compared to other potassium salts.⁴ • Microencapsulated forms may cause less GI irritation/bleeding compared to wax-matrix tabs.^{3,5} • Oral liquid formulations act quickly and are usually inexpensive; however, they must be diluted and have poor adherence due to a strong unpleasant/bitter taste.^{3,5} • Microencapsulated tablets can be dispersed in 120 mL water, let sit two minutes, stir 30 seconds, then drink. Rinse cup with 30 mL of water and drink, then repeat with 30 mL more.⁴ • Microencapsulated capsules can be opened and sprinkled onto a small amount of soft food (e.g., applesauce, pudding).⁴ Food should be swallowed immediately, without chewing, and followed by a full glass of water.⁴ • Some wax-matrix formulations produce a “ghost” tab in the stool.⁴ • Concentrated injectable solution is considered a high-alert medication by ISMP.⁶
Microencapsulated tablet, sustained-release	Generics: 10 mEq (US), 20 mEq <i>Klor-Con M10</i> (US): 10 mEq <i>Klor-Con M15</i> (US): 15 mEq <i>Klor-Con M20</i> (US): 20 mEq	
Microencapsulated capsule, sustained-release	Generics: 8 mEq, 10 mEq (US) <i>Klor-Con Sprinkle</i> (US): 8 mEq, 10 mEq	
Powder packets for oral solution (US only)	Generics: 10 mEq, 20 mEq <i>Klor-Con</i> : 20 mEq	
Oral liquid	Generics: 20 mEq/15 mL (10%), 40 mEq/15 mL (20%) (US)	
Injectable solution	Generics (must be diluted): 2 mEq/mL vials Premixed intravenous bags are also available with various diluents, in several concentrations and sizes.	

Potassium Salt/Forms	Example Brands/Strengths ^a	Comments
POTASSIUM PHOSPHATE: 1,350 mg of monobasic potassium phosphate is equivalent to 10 mEq (mmol) of potassium.		
Tablet (US only)	<i>K-Phos</i> , generic: 500 mg (to be dissolved in liquid)	<ul style="list-style-type: none"> • Choice when phosphate deficit accompanies potassium depletion (e.g., diabetic ketoacidosis).³ • Also used for the prevention and treatment of hypophosphatemia.⁴ • Injectable solution is considered a high-alert medication by ISMP (US).⁶
Injectable solution	Generics (must be diluted): 3 mmol/mL (US), 1.29 mmol/mL (Canada)	
POTASSIUM BICARBONATE: 1,000 mg of potassium bicarbonate is equivalent to 10 mEq (mmol) of potassium.		
Capsule (US only)	<i>K-Bicarb</i> (OTC): 99 mg Generics (OTC): 300 mg, 500 mg, 1,020 mg, 2,100 mg	<ul style="list-style-type: none"> • Can be considered in patients with hypokalemia and metabolic acidosis due to its alkalinizing effect.^{3,4}
Effervescent tablet (US only)	<i>Effer-K</i> : 10 mEq, 20 mEq, 25 mEq <i>Klor-Con EF</i> : 25 mEq	
POTASSIUM GLUCONATE: 2,350 mg of potassium gluconate is equivalent to 10 mEq (mmol) of potassium.		
Tablet/caplet/capsule	Generics (US, OTC): 90 mg, 99 mg Generics (Canada): 50 mg, 99 mg	<ul style="list-style-type: none"> • Considered a dietary supplement to prevent hypokalemia.⁴ • Gluconate metabolizes to bicarbonate, so can be considered in patients with hypokalemia and metabolic acidosis.⁷
Extended-release tablet/caplet	Generics (US, OTC): 99 mg, 100 mg, 195 mg Generics (Canada): 100 mg, 195 mg	
POTASSIUM ACETATE: 975 mg of potassium acetate is equivalent to 10 mEq (mmol) of potassium.		
Injectable solution	Generics (must be diluted): 2 mEq/mL (US), 4 mEq/mL (Canada)	<ul style="list-style-type: none"> • Consider for treatment and prevention of hypokalemia if acidemia is also present, when oral therapy is not an option.⁴ • Alternative to potassium chloride when you want to avoid administering chloride.

Potassium Salt/Forms	Example Brands/Strengths ^a	Comments
POTASSIUM CITRATE: 1,075 mg of potassium citrate is equivalent to 10 mEq (mmol) of potassium.		
Extended-release tablet	<i>Urocit-K</i> : 5 mEq, 10 mEq, 15 mEq (US) Generics: 5 mEq, 10 mEq, 15 mEq (additional strengths available OTC in Canada) <i>K-Citra</i> (Canada): 10 mEq	<ul style="list-style-type: none"> • Generally used for the management of renal tubular acidosis with calcium stones, uric acid kidney stones, or calcium kidney stones in patients with hypocitruria (low urinary citrate levels).⁸ • <i>K-Citra</i> is recommended for treatment or prophylaxis of hypokalemia and to help reduce the formation of kidney stones.⁹ • Can be considered in patients with distal renal tubular acidosis plus hypokalemia, high blood and urine calcium levels, or calcium kidney stones.¹⁰ • Some formulations (slow-release wax matrix; e.g., <i>Urocit-K</i>) produce a “ghost” tab in the stool.¹¹
Oral solution	<i>K-Citra</i> : 10 mEq/5 mL	
Capsules (Canada only)	Generics: 99 mg (~0.9 mEq), 316 mg (~3 mEq), others	

Abbreviations: GI = gastrointestinal; ISMP = Institute for Safe Medication Practices; OTC = over-the-counter.

- a. Note that OTC potassium formulations are available in multiple strengths and this list may not be all-inclusive.

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

Levels of Evidence

In accordance with our goal of providing Evidence-Based information, we are citing the **LEVEL OF EVIDENCE** for the clinical recommendations we publish.

Level	Definition	Study Quality
A	Good-quality patient-oriented evidence.*	<ol style="list-style-type: none"> 1. High-quality randomized controlled trial (RCT) 2. Systematic review (SR)/Meta-analysis of RCTs with consistent findings 3. All-or-none study
B	Inconsistent or limited-quality patient-oriented evidence.*	<ol style="list-style-type: none"> 1. Lower-quality RCT 2. SR/Meta-analysis with low-quality clinical trials or of studies with inconsistent findings 3. Cohort study 4. Case control study
C	Consensus; usual practice; expert opinion; disease-oriented evidence (e.g., physiologic or surrogate endpoints); case series for studies of	

diagnosis, treatment, prevention, or screening.

***Outcomes that matter to patients** (e.g., morbidity, mortality, symptom improvement, quality of life).

[Adapted from Ebell MH, Siwek J, Weiss BD, et al. Strength of Recommendation Taxonomy (SORT): a patient-centered approach to grading evidence in the medical literature. *Am Fam Physician* 2004;69:548-56.

<https://www.aafp.org/pubs/afp/issues/2004/0201/p548.html>]

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