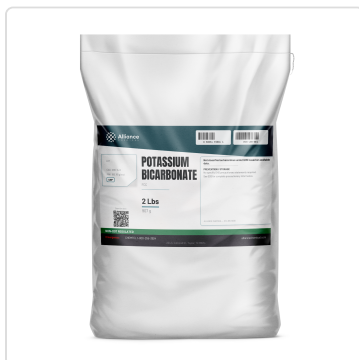


PRODUCT IDENTIFICATION



Product Name: Potassium Bicarbonate - FCC USP Grade

CAS Number: 298-14-6

Molecular Formula: CHKO_3

Molecular Weight: 100.115 g/mol

Grade: USP Grade

Purity / Concentration: Not Available

Synonyms: Potassium Hydrogen Carbonate, Kalium Bicarbonate

PRODUCT OVERVIEW

Potassium Bicarbonate FCC USP Grade is a high-purity, white crystalline powder essential for pH regulation and chemical processing. With a certified assay of 100.3% and strictly controlled impurity levels, such as heavy metals below 10 ppm, this compound ensures consistent performance in sensitive applications.

Grade Significance: The USP Grade designation guarantees that this product meets the rigorous quality, purity, and safety standards set by the United States Pharmacopeia for pharmaceutical and food-grade applications. It provides end users with the assurance that the material is free from harmful contaminants and suitable for human consumption or medical use.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay	%	100.3	99.5	101.5	Titration/Gravimetric
pH	—	8.3	8	8.6	pH Meter
Arsenic As	ppm	0.03	0	1.5	ICP-MS
Heavy Metals As Pb	ppm	≤ 10 ppm	—	—	ICP-MS (as Pb)
Iron	ppm	3	—	10	ICP
Lead Pb	ppm	≤ 0.5 ppm	—	—	ICP-MS
Chloride Cl	%	0.0045	—	0.015	ICP
Sulfate (SO_4^{2-})	%	0.0045	—	0.015	ICP-MS
Mercury Hg	ppm	0.04	0	0.3	ICP-MS

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Fine white crystalline powder, uniform granulation	Odor	Odorless
Form	Solid	Boiling Point	87°C (188.6°F)
Melting / Freezing Point	Decomposes before melting	Solubility	High water solubility, moderate alcohol compati...
Molecular Formula	CHKO_3	Molecular Weight	100.115 g/mol
Density (25°C)	1.58 g/mL		

APPLICATIONS

1. **Pharmaceutical** — Used as a critical buffering agent to maintain stable pH levels in various drug formulations.
2. **Food and Beverage** — Serves as an effective leavening agent and acidity regulator in baking and food production processes.
3. **Agriculture** — Provides essential potassium to support healthy plant growth and helps optimize soil nutrient profiles.
4. **Water Treatment** — Utilized to precisely adjust the alkalinity and pH of water systems for industrial and municipal compliance.

STORAGE & HANDLING

Potassium Bicarbonate should be stored in a cool, dry environment in tightly sealed containers to prevent moisture absorption and caking. Maintaining these conditions ensures the integrity of the chemical composition and prevents potential contamination that could compromise its USP-grade status.

- Store in a cool, dry place away from direct sunlight.
- Use containers made of HDPE or glass to prevent contamination.
- Avoid contact with strong acids or oxidizing agents.
- Ensure proper ventilation when handling to avoid inhalation of dust.
- Wear appropriate personal protective equipment (PPE) such as gloves and safety goggles.

AVAILABLE PACKAGING

- 2 lbs.
- 5 Lbs.
- 50 Lbs.

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Warning

No GHS pictograms assigned.

Hazard Statements:

- Not Classified
- Reported as not meeting GHS hazard criteria by 300 of 301 companies (only 0.3% companies provided GHS information). For more detailed information, please visit ECHA C&L website.

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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