

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 (KHCO_3) is a white crystalline salt that is commonly used as a buffering agent and pH regulator in various applications. It is highly soluble in water and serves as a source of potassium ions, making it essential in both food and pharmaceutical industries.

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 to maintain pH levels in pharmaceutical formulations.
2. **Food Industry** — Acts as a leavening agent and pH regulator in food products.
3. **Agriculture** — Provides potassium for plant growth and improves soil quality.
4. **Water Treatment** — Utilized to adjust the pH of water in various treatment processes.
5. **Laboratory** — Serves as a reagent in various chemical reactions and analyses.

STORAGE & HANDLING

- 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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