



KEEP INGREDIENTS CO. LTD

No. 2019, Unit 1, Building 10, Yuexiucheng Phase 1, Guodu Xuefu Street, Chang'an District, Xi'an, Shaanxi,
710119, China

TECHNICAL DATA SHEET

2-Ketoglutaric Acid (AKG, Alpha-Ketoglutaric Acid)

1. PRODUCT DESCRIPTION

2-Ketoglutaric acid (AKG, alpha-ketoglutaric acid) is an organic acid with the molecular formula $C_5H_6O_5$ and CAS No. 328-50-7. The product is a white crystalline powder standardized to a content of not less than 99% (HPLC). According to the supplied source statement, the product is obtained by biological fermentation and contains no animal-derived ingredients or cell-culture-derived substances.

2. PRODUCT INFORMATION

Item	Information
Product name	2-Ketoglutaric acid (AKG, alpha-ketoglutaric acid)
Chemical name	2-Ketoglutaric acid / Alpha-ketoglutaric acid
Molecular formula	$C_5H_6O_5$
CAS number	328-50-7
Assay	2-Ketoglutaric acid $\geq 99\%$ (HPLC)
Appearance	White crystalline powder
Particle size	80–120 mesh
Odour	Characteristic
Source	Biological fermentation (no animal-derived / cell-culture substances)
Country of origin	China
Supplier	KEEP INGREDIENTS CO. LTD, Xi'an, Shaanxi, China
Shelf life	24 months (if sealed and stored properly)

3. PRODUCT SPECIFICATION

Item	Specification	Test method
2-Ketoglutaric acid	NLT 99%	HPLC

Item	Specification	Test method
Appearance	White crystalline powder	Visual
Mesh	80–120	Visual
Odour	Characteristic	Organoleptic
Loss on drying	NMT 5%	USP <731>
Water	NMT 5%	USP <731>

Item	Specification	Test method
------	---------------	-------------

Item	Specification	Test method
Total heavy metals	NMT 10 ppm	USP <231>
Arsenic (As)	NMT 2.0 ppm	ICP-MS
Mercury (Hg)	NMT 1.0 ppm	AAS
Cadmium (Cd)	NMT 2.0 ppm	ICP-MS
Lead (Pb)	NMT 0.5 ppm	ICP-MS

Item	Specification	Test method
Total plate count	NMT 1,000 CFU/g	USP <2021>
Yeast, mould & fungi	NMT 100 CFU/g	USP <2021>
E. coli	Negative	USP <2022>
Staphylococcus	Negative	USP <2022>
Salmonella	Negative	USP <2022>

Packing: packed in a food-grade plastic bag inside and an aluminum-foil bag outside, 25 kg/drum.

Storage: store in a well-closed container, away from moisture and direct sunlight.

Shelf life: 24 months if sealed and stored properly.



4. CERTIFICATE OF ANALYSIS

Field	Detail
Product name	2-Ketoglutaric acid
Batch No.	260403
CAS number	328-50-7
Molecular formula	C ₅ H ₆ O ₅
Quantity	100 kg
Manufacture date	Apr 3, 2026
Expiry date	Apr 2, 2028
Country of origin	China
Reference	USP 34

Item	Specification	Result	Test method
2-Ketoglutaric acid	NLT 99%	99.2%	HPLC
Appearance	White crystalline powder	Conform	Visual
Mesh	80–120	Conform	Visual
Odour	Characteristic	Conform	Organoleptic
Loss on drying	NMT 5%	0.35%	USP <731>
Ash	NMT 5%	0.45%	USP <731>
Total heavy metals	NMT 10 ppm	Conform	USP <231>
Arsenic (As)	NMT 2.0 ppm	< 0.05	ICP-MS
Mercury (Hg)	NMT 1.0 ppm	< 0.005	AAS
Cadmium (Cd)	NMT 2.0 ppm	< 0.01	ICP-MS
Lead (Pb)	NMT 0.5 ppm	<	ICP-MS
Total plate count	NMT 1,000 CFU/g	Conform	USP <2021>
Yeast, mould & fungi	NMT 100 CFU/g	Conform	USP <2021>
E. coli	Negative	Negative	USP <2022>
Staphylococcus	Negative	Negative	USP <2022>
Salmonella	Negative	Negative	USP <2022>

5. NUTRITIONAL INFORMATION (per 100g)

Item	Value
Energy	1700 kJ
Total carbohydrates	99.0 g
Total fat	0 g
Protein	0 g
Ash	0.35 g
Moisture	0.4 g

Ingredient	Content	Ingredient	Content
Total carbohydrates	99	Fat	0
Protein	0	Dietary fiber	0
Vitamin A	0	Vitamin C	0
Vitamin E	0	Vitamin B	0
Ca	0	Fe	0
Zn	0	Cu	0

6. STATEMENTS AND COMPLIANCE

- **Allergen:** the product does not contain cereals containing gluten, crustaceans, eggs, fish, peanuts, soy, milk, nuts, celery, mustard, sesame, sulphur dioxide and sulphites, lupin or molluscs; no risk of cross-contamination during processing.
- **BSE/TSE free:** the product and its raw materials are BSE/TSE free.
- **Gluten free:** the product and its raw materials are gluten free.
- **GMO free:** the product and its raw materials are GMO free.
- **Non-irradiation:** the product is non-irradiated.
- **Vegan & vegetarian:** the product is vegan and vegetarian.
- **Natural:** the product and its raw materials are 100% natural.
- **Country of origin:** the product and its raw materials are from China.
- **Source:** the product is obtained by biological fermentation and contains no animal-derived or cell-culture-derived substances.
- **GRAS:** the product is generally recognized as safe (GRAS).
- **Ingredient composition:** starting material 2-ketoglutaric acid; carrier water 0.5% and ash 0.5%.



7. STORAGE AND TRANSPORTATION

- Shelf life: 24 months if sealed and stored properly.
- Storage: store in a well-closed container, away from moisture and direct sunlight.
- Packing: packed in a food-grade plastic bag inside and an aluminum-foil bag outside, 25 kg/drum.