



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

Red Korean Ginseng Root Extract (Ginsenosides 80%, UV)

1. GENERAL INFORMATION

Item	Information
Product name	Red Ginseng Root Extract
Botanical name	Panax ginseng C.A. Meyer
CAS number	90045-38-8
Botanical family	Araliaceae
Part used	Root (dried red ginseng root)
Extraction solvent	Ethanol & water
Carrier	Maltodextrin (added to target assay of ginsenosides)
Country of origin	China
Origin of the raw material	North-east China, Jilin Province
Growing condition	Cultivated
Collection period	September – October (autumn)
Particle size	99% through 80 mesh
Intended use	Raw material for nutraceuticals, dietary supplements, cosmetics, etc.



2. ACTIVE SUBSTANCES AND APPLICATIONS

Active substances. The main active ingredient is ginsenosides (saponins); the extract also contains polysaccharides, essential oil, amino acids, pectin, vitamins, sterols and fatty acids, etc.

Physiologic and healthcare applications. Tonic, adaptogen, antioxidant; tonic for physical and mental fatigue; anti-stress; hypoglycemic; sexual enhancer; immune system booster. Topical use: emollient, hair conditioning, skin protecting, tonic.

3. TOXICOLOGICAL DATA, CONTRA-INDICATIONS AND WARNINGS

Toxicological data. Plant extract of natural origin for which no experimental data are available for acute toxicity; by analogy with chemically similar products, a moderate level of acute toxicity is assumed.

Contra-indications and warnings. High doses (more than 3 g/day for months or years) can cause “ginseng abuse syndrome”: insomnia, nervousness, tachycardia and hypertension. Do not abruptly discontinue its use. It is contraindicated in pregnancy and before puberty.

Notes. Possible variation in color from batch to batch and the presence of small dots (stippling) do not affect the final quality of the extract; indeed, they demonstrate its naturalness.

Preservatives: absent.

Antioxidants: absent.

4. PRODUCT SPECIFICATION

Table 1 — Product specification

Item	Specification	Method
Description	Fine powder	Organoleptic
Assay	1%–80%	HPLC/UV
Color	From light yellow to brown	Organoleptic
Odor	Characteristic	Organoleptic
Taste	Characteristic	Organoleptic
TLC	Conform	ChP 2020
Bulk density	0.35–0.55 g/ml	ChP 2020
Tapped density	0.55–0.75 g/ml	ChP 2020
Loss on drying	≤ 5%	ChP 2020
Ash	≤ 5%	ChP 2020
pH	5.0–7.0	ChP 2020
Heavy metals	≤ 10 ppm	Atomic absorption
Lead (Pb)	≤ 0.3 ppm	Atomic absorption
Arsenic (As)	≤ 0.2 ppm	Atomic absorption
Cadmium (Cd)	≤ 1.0 ppm	Atomic absorption
Mercury (Hg)	≤ 0.1 ppm	Atomic absorption
PAHs (4)	NMT 50 ppb	GC-MS
Pesticide residues	EC 396(2005)	LC/GC-MS
Residual solvents	2009/32/EC	GC-MS
Microbiological quality — Total plate count	≤ 1,000 cfu/g	ChP 2020
Microbiological quality — Yeasts and molds	≤ 100 cfu/g	ChP 2020
Microbiological quality — E. coli	Negative	ChP 2020
Microbiological quality — Salmonella	Negative	ChP 2020

Note: GMO-free; gluten-free; non-irradiated (all starting materials are non-irradiated; no irradiated material is used).

5. PRODUCTION PROCESS

Red ginseng root is processed into extract powder through the following main steps: raw material → selecting → water washing → extraction → solid and liquid separation → concentration → vacuum drying → crushing → sieving → blending → inner packing → outer packing → storage (Figure 1).

Key process control parameters and quality control (QC) testing are applied at the relevant steps, including raw-material testing, semi-finished-product testing, finished-product testing and in-house testing of packaging materials, with process controls on solvent amount, time and temperature (extraction), temperature, vacuum degree and density (concentration), vacuum degree, temperature and time (vacuum drying), particle size (sieving) and time (blending).

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Flow Chart of Korean Ginseng Root Extract

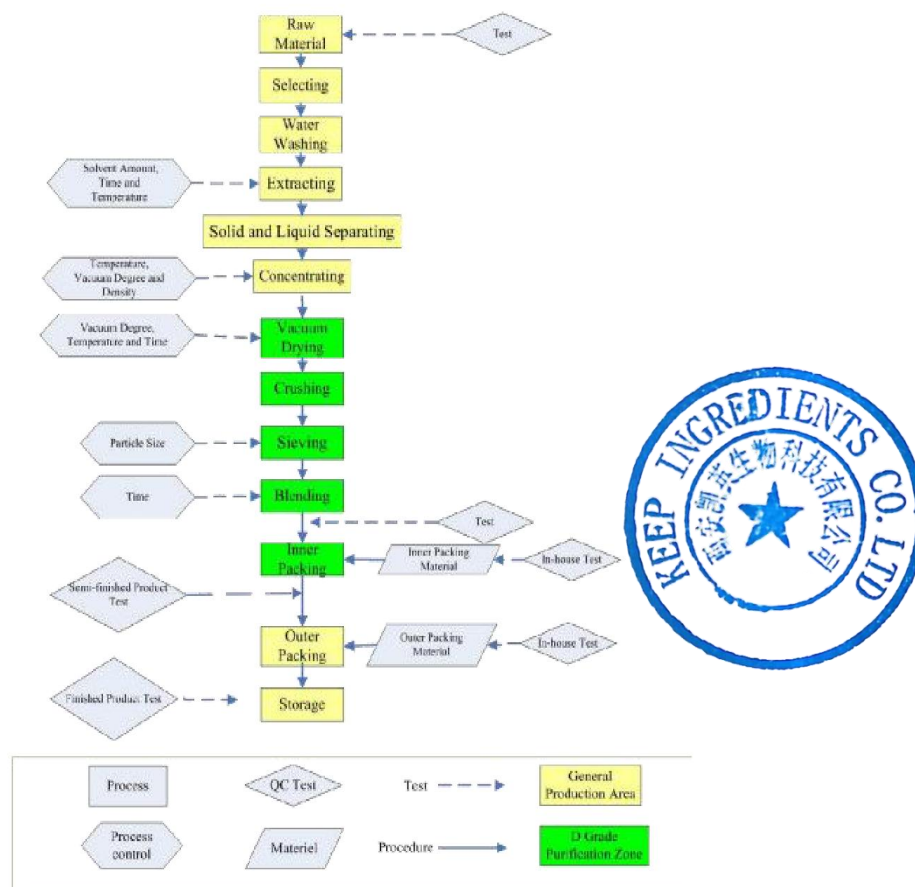


Figure 1 — Flow chart of Red Korean Ginseng Root Extract production

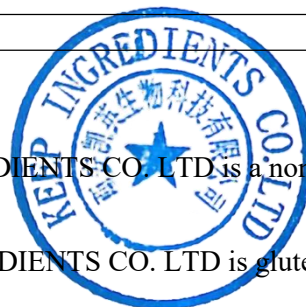
6. PACKAGING, STORAGE AND SHELF LIFE

Item	Detail
Packaging	Inner packing with two layers of PE bags; outer packing with a 25 kg cardboard drum (38 mm × 38 mm × 50 mm).
Storage	Store in a dry and cool place, away from moisture and direct sunlight.
Shelf life	Two years

7. STATEMENTS

Non-GMO. The Red Ginseng Root Extract supplied by KEEP INGREDIENTS CO. LTD is a non-GMO product.

Gluten-free. The Red Ginseng Root Extract supplied by KEEP INGREDIENTS CO. LTD is gluten-free.



Non-irradiation. All starting materials are non-irradiated; no irradiated material is used in the production of the Red Ginseng Root Extract.

8. CERTIFICATE OF ANALYSIS

Certificate of Analysis — Batch KYKRGE2025071501

Field	Detail
Product name	Red Ginseng Root Extract
Batch number	KYKRGE2026071501
Latin name	Panax ginseng C.A. Meyer
Quantity	500 kg
Part used	Root
Extraction solvent	Ethanol & water
Manufacture date	15/07/2026
Report date	20/07/2026

Item	Specification	Result	Test method
Assay (based on dry)	Total ginsenosides $\geq$ 80.0%	80.2%	UV
Appearance	Fine powder	Complies	Visual
Color	Light yellow	Complies	Visual
Odor & taste	Characteristic	Complies	Organoleptic
Loss on drying	NMT 5.0%	3.9%	ChP 2020
Ash	NMT 5.0%	1.2%	ChP 2020
Particle size	NLT 95% through 80 mesh	Complies	ChP 2020
Total heavy metals	NMT 10.0 mg/kg	Complies	Atomic absorption
Lead (Pb)	NMT 2.0 mg/kg	Complies	Atomic absorption
Arsenic (As)	NMT 1.0 mg/kg	Complies	Atomic absorption
Mercury (Hg)	NMT 0.2 mg/kg	Complies	Atomic absorption
Cadmium (Cd)	NMT 0.1 mg/kg	Complies	Atomic absorption
Pesticide residues	EU Reg. 396/2005	Complies	LC/GC-MS
Total plate count	NMT 1,000 cfu/g	Complies	AOAC
Yeast & mold	NMT 100 cfu/g	Complies	AOAC
E. coli	Negative	Negative	AOAC
Salmonella	Negative	Negative	AOAC

Packaging: inner packing with two layers of plastic bags; outer packing with a 25 kg cardboard drum. Storage: store in a well-closed container away from moisture and direct sunlight. Shelf life: 2 years if sealed and stored properly.

Commitment note: Non-GMO; non-irradiation.

Conclusion: The product is qualified.

This Technical Data Sheet should be read in conjunction with the supplied Certificate of Analysis and relevant statements. The information provided is based on the documents supplied by KEEP INGREDIENTS CO. LTD.

