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

Liposomal Magnesium Glycinate 80%

1. PRODUCT DESCRIPTION

Liposomal magnesium glycinate 80% is a powdered magnesium glycinate preparation in which magnesium glycinate (minimum 80%) is incorporated into nanoliposome vesicles via NLCs (Nanostructured Lipid Carriers) and nanonization treatment, together with sunflower lecithin, phytosterol and silica. The liposome vesicles are well-defined with intact shape and uniform distribution, and the product is standardized to a magnesium content of not less than 15%.

2. PRODUCT INFORMATION

Item	Information
Product name	Liposomal Magnesium Glycinate 80%
Dosage form	Powder
Magnesium glycinate content	≥ 80%
Magnesium content	≥ 15%
Appearance	Off-white to light yellow powder
Odour	Natural smell and characteristic
Particle size	100 nm – 300 nm
Mesh size	100% passes 80 mesh
Country of origin	China
Manufacturer	KEEP INGREDIENTS CO. LTD, Xi'an, Shaanxi, China
Shelf life	24 months (under stated conditions, in original packaging)

3. PRODUCT SPECIFICATION

Item	Specification	Test method
Magnesium glycinate	≥ 80%	HPLC
Magnesium	≥ 15%	HPLC
Appearance	Off-white to light yellow powder	Visual
Odour	Natural smell and characteristic	Organoleptic
Mesh size	100% passes 80 mesh	Mesh screen or equivalent
Particle size (liposome)	100 nm – 300 nm	TEM image
Identification	Liposomal vesicles well-defined, intact shape and uniform distribution at 100 nm	TEM image
Ash content	≤ 5.0%	Eur.Ph. <2.4.16>
Loss on drying	≤ 5.0%	Eur.Ph. 7.0 [2.8.17]

Item	Specification	Test method
Total heavy metals	≤ 20 ppm	ICP-MS or equivalent
Lead	≤ 2 ppm	ICP-MS or equivalent
Cadmium	≤ 1 ppm	ICP-MS or equivalent
Mercury	≤ 0.1 ppm	ICP-MS or equivalent
Arsenic	≤ 2 ppm	ICP-MS or equivalent

Item	Specification	Test method
Total plate count	≤ 1,000 CFU/g	AOAC or equivalent
Yeast & mould	≤ 100 CFU/g	AOAC or equivalent
E. coli	Negative	AOAC or equivalent
Salmonella	Negative	AOAC or equivalent
Staphylococcus	Negative	AOAC or equivalent

4. CERTIFICATE OF ANALYSIS

Field	Detail
Product name	Liposomal Magnesium Glycinate
Batch No.	KYLMG2026081501
Place of origin	China
Dosage form	Powder
Quantity	2800 kgs
Manufacture date	2026.08.15
Expiry date	2028.08.14

Item	Specification	Result	Test method
Magnesium glycinate	≥ 80%	Conform	HPLC
Magnesium	≥ 15%	Conform	HPLC
Appearance	Off-white to light yellow powder	Conform	Visual
Odour	Natural smell and characteristic	Conform	Organoleptic
Mesh size	100% pass 80 mesh	Conform	Mesh screen or equivalent
Particle size	100 nm – 300 nm	Conform	TEM image
Identification	Liposome vesicles well-defined, intact shape and uniform distribution	Conform	TEM image
Ash content	≤ 5.0%	3.11%	Eur.Ph. <2.4.16>
Loss on drying	≤ 5.0%	3.28%	Eur.Ph. 7.0 [2.8.17]
Total heavy metals	≤ 20 ppm	Conform	ICP-MS or equivalent
Lead	≤ 2 ppm	Conform	ICP-MS or equivalent
Cadmium	≤ 1 ppm	Conform	ICP-MS or equivalent
Mercury	≤ 0.1 ppm	Conform	ICP-MS or equivalent
Arsenic	≤ 2 ppm	Conform	ICP-MS or equivalent
Total plate count	≤ 1,000 CFU/g	Conform	AOAC or equivalent
Yeast & mould	≤ 100 CFU/g	Conform	AOAC or equivalent
E. coli	Negative	Conform	AOAC or equivalent
Salmonella	Negative	Conform	AOAC or equivalent
Staphylococcus	Negative	Conform	AOAC or equivalent

5. COMPOSITION

No.	Ingredient	Content
1	Magnesium glycinate	80%
2	Sunflower lecithin	10%
3	Phytosterol	8%
4	Silica	2%

6. NUTRITIONAL INFORMATION (per 100g)

Items	Content	Nutrient reference values % / NRV%
Energy	380 kcal	18%
Protein	0.2 g	0.5%
Fat	36 g	59%
Carbohydrate	3 g	1%
Sodium	0 g	0%

7. PRODUCTION PROCESS

Step	Operation
1	Magnesium glycinate
2	NLCs & Nanonization treatment
3	Liposomal magnesium glycinate
4	Sample
5	Drying
6	Grinding & blending
7	Finished product

8. STATEMENTS AND COMPLIANCE

- **Non-GMO (GMO free):** the product is non-GMO; all ingredients are of non-GMO origin.
- **Gluten free:** the product contains no gluten-containing ingredients.
- **Vegan / Vegetarian:** the product contains no animal-derived ingredients.
- **BSE/TSE free:** the product is free from BSE (Bovine Spongiform Encephalopathy) and TSE (Transmissible Spongiform Encephalopathy).
- **Non-irradiation:** the product has not been irradiated.
- **Allergen:** the product does not contain the major food allergens (milk, egg, fish, crustaceans/molluscs, peanuts, tree nuts, gluten-containing cereals, sesame, mustard, lupin, celery, sulphur dioxide/sulphites above 10 ppm). Sunflower lecithin is a non-soy lecithin.
- **Conformance:** the product conforms to the stated specifications.
- **Composition:** the product contains magnesium glycinate 80%, sunflower lecithin 10%, phytosterol 8% and silica 2% (per the product composition statement).
- **Nutritional information:** the nutritional values are given per 100 g.

9. STORAGE AND TRANSPORTATION

- Shelf life: 24 months under the stated conditions and in the original packaging.
- Storage: store in a cool and dry place; keep away from strong light and heat.
- Packing: sealed export-grade drum with a double of sealed plastic bag.