

# TECHNICAL DATA SHEET

## Vitamin K2 (MK-7) Oil

Mixed with MCT Oil | ≥ 1.0% (> 10,000 µg/g) | Food Grade

The supplier and the customer undertake to maintain the CONFIDENTIAL information contained or enclosed in this document. This technical data sheet is compiled by KEEP INGREDIENTS CO. LTD for the evaluation of the product described herein.

### 1. TECHNICAL DATA SHEET

#### Product Description

Vitamin K2 (MK-7) Oil is a menaquinone-7 ingredient supplied as a pale yellow oily liquid. The product is a blend of Vitamin K2 (MK-7) oil (≥ 1.0%, i.e. > 10,000 µg/g) mixed with medium-chain triglyceride (MCT) oil (≤ 99.0%). It is produced by a fermentation process from Natto (Bacillus subtilis natto) and is a natural, non-modified raw material. Its structure is not chemically modified and matches the Food Chemical Codex (FCC) identification standards.

The manufacturing route covers upstream fermentation, filtration / concentration / extraction, sterile filtration and VK2 refining, followed by the oil formulation line in which the refined VK2 is blended with vegetable carrier oils (MCT, sunflower or olive oil), dissolved, weighed, filled and packed (Section 3 – Process Chart).

#### Product Information

| Item                            | Information                                                                                                                                                                  |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name                    | Vitamin K2 (MK-7) Oil (mixed with MCT Oil)                                                                                                                                   |
| Other names                     | Vitamin K2; Menaquinone; Menaquinone-7; MK-7; (All-E)-2-(3,7,11,15,19,23, 27-heptamethyl-2,6,10,14,18,22,26-octacosaeptaenyl)-3-methyl-1,4-napht halenedione                 |
| Composition                     | Vitamin K2 (MK-7) oil ≥ 1.0% (> 10,000 µg/g); MCT Oil ≤ 99.0%                                                                                                                |
| CAS No.                         | 27670-94-6                                                                                                                                                                   |
| Molecular formula               | C <sub>46</sub> H <sub>60</sub> O <sub>2</sub>                                                                                                                               |
| Molecular weight                | 649.0                                                                                                                                                                        |
| Reference method                | HPLC                                                                                                                                                                         |
| Reference standard              | EU Standard; Food Chemical Codex (FCC)                                                                                                                                       |
| Appearance                      | Pale yellow oily liquid                                                                                                                                                      |
| Grade                           | Food Grade                                                                                                                                                                   |
| Dangerous grade                 | Non-hazardous                                                                                                                                                                |
| Period of validity / Shelf life | 2 years                                                                                                                                                                      |
| Countries of origin             | China (manufactured in China)                                                                                                                                                |
| Customs tariff                  | 2936290000                                                                                                                                                                   |
| Standard inner packaging        | 1 kg/bottle (inner), 10 kg/carton                                                                                                                                            |
| Pallet packaging                | 500 kg/pallet (10 kg/carton × 50)                                                                                                                                            |
| Storage                         | Keep the container tightly closed in a cool, dry place, protected from light and moisture. Air and light sensitive; once opened, use as soon as possible. Store below 25 °C. |

## 2. PRODUCT SPECIFICATION

The specifications below are compiled from the supplied product facts and product declarations. A Certificate of Analysis (COA) is issued with each released batch; for the COA batch numbering and label data refer to Section 4 – Traceability System.

### 2.1 Composition & General Specification

| Item              | Specification                                                  | Method |
|-------------------|----------------------------------------------------------------|--------|
| Description       | Pale yellow oily liquid                                        | Visual |
| Vitamin K2 (MK-7) | ≥ 1.0% (> 10,000 µg/g)                                         | HPLC   |
| MCT Oil           | ≤ 99.0%                                                        | —      |
| Identification    | Conforms to Food Chemical Codex (FCC) identification standards | FCC    |
| Purity            | Complies with the requirements of Regulation (EC) No 231/2012  | —      |
| Grade / Status    | Food Grade; Non-hazardous; Natural, non-modified               | —      |

### 2.2 Heavy Metals (each batch)

Each batch of Vitamin K2 (MK-7) & MCT Oil Blend complies with the heavy metals specifications set in Regulations (EC) No 231/2012, No 2023/915 and in the Food Chemical Codex monograph. Tests are performed randomly; reports are available on request.

| Heavy metal        | Maximum permitted | Analysis method     |
|--------------------|-------------------|---------------------|
| Arsenic (As)       | ≤ 0.1 ppm         | ICP-MS, ISO 17294-2 |
| Lead (Pb)          | ≤ 2 ppm           | ICP-MS, ISO 17294-2 |
| Mercury (Hg)       | ≤ 0.3 ppm         | AAS, NF EN 13806    |
| Cadmium (Cd)       | ≤ 0.3 ppm         | ICP-MS, ISO 17294-2 |
| Total heavy metals | ≤ 10 ppm          | FCC (Method 2)      |

### 2.3 Contaminants & Other Controls

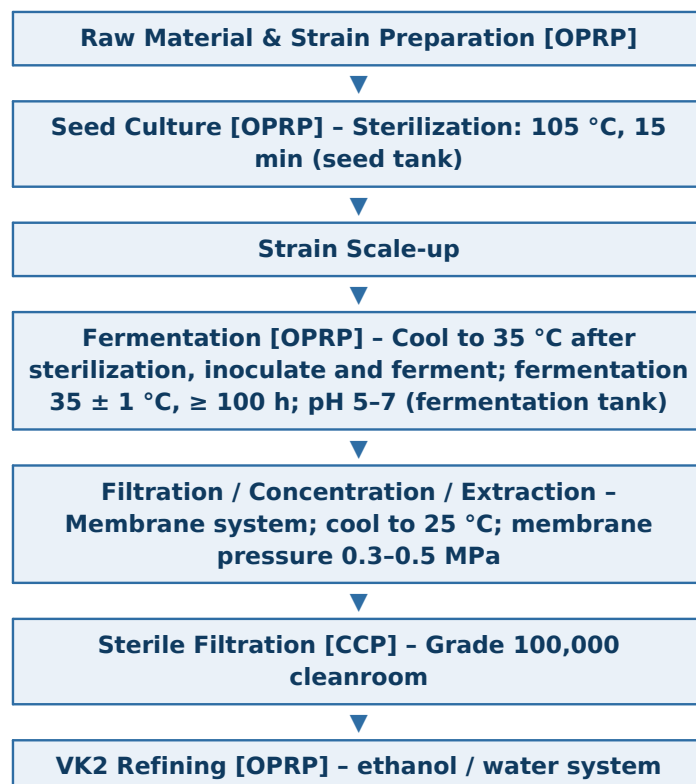
Each batch of Vitamin K2 (MK-7) & MCT Oil Blend complies with:

- State of California's Proposition 65 current list of chemicals – complies.
- Mycotoxins (Aflatoxins B1, B2, G1, G2 and Ochratoxin A) – immunoenzymatic method.
- PCBs (method ASU L 00.00-34 / AOAC) and Dioxins (method EPA 1613), PAHs (incl. Benzo(a)pyrene) – specifications set in Regulation (EC) No 2023/915.
- Pesticides – specifications set in Regulation (EC) No 396/2005; method ASU L 00.00-115 / QuECHERS screening to ensure MRLs are met.
- Radioactivity – Cs 134 + Cs 137 < 50 Bq/kg.
- Melamine – complies.
- No solvents (Class 1, 2 or 3) used in the fermentation-based production (see Elemental Impurities / Residual Solvents Statement, Section 5.6).
- The product does not contain (i.e. below detection limits; no cross-contamination risk identified, not tested): Bisphenol A, Nitrosamine, Furfural and 2-Chloroacetamid, Triclosan, 1,2-Propylene glycol, Glycol Ethers, Free ethylene oxide, Camphor Benzalkonium Methosulfate, Phthalates, Formol, SVHCs, CMR, VOCs, Latex, 3-MPCD, maleic acid, maleic anhydride, veterinary residues.

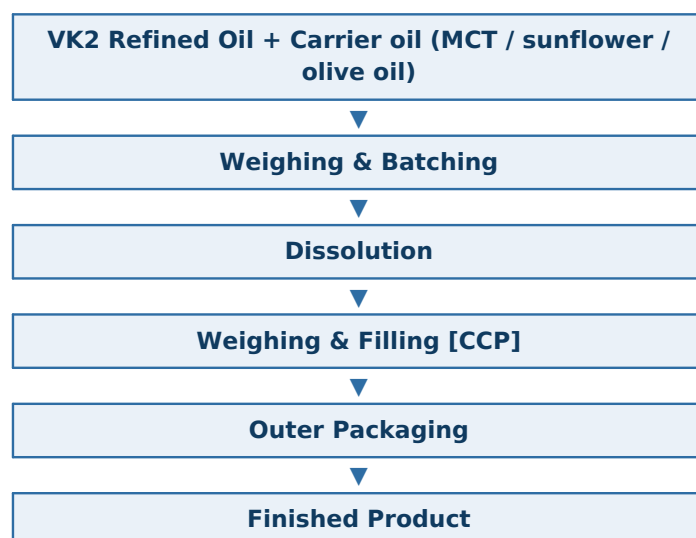
### 3. PROCESS CHART

Vitamin K2 (MK-7) is obtained by a fermentation process from Natto (*Bacillus subtilis natto*). The process is divided into an upstream fermentation / refining stage and a downstream formulation stage for the oil product. Control points, equipment and key process parameters are indicated for the fermentation route; CCP = Critical Control Point, OPRP = Operational Prerequisite Programme.

#### 3.1 Upstream - Fermentation & Refining



#### 3.2 Downstream - Oil Formulation (VK2 Oil Line)



Note: For the oil formulation line, the carrier oil is added as auxiliary material (① MCT oil, olive oil, sunflower oil, etc.). The flow chart shown above reflects the fermentation and oil formulation process as supplied by KEEP INGREDIENTS.

## 4. TRACEABILITY SYSTEM

Vitamin K2 (MK-7) & MCT Oil Blend fully complies with the traceability requirements laid down in Regulation (EC) No 178/2002.

- Each packaging unit of finished product carries a unique batch number on its label.
- A batch is a defined quantity from one recipe (same product quality), with a starting date, the same packaging and a unique code. Batch size depends on orders.
- Lot code meaning: LOT NUMBER 01 = 01 for the batch no. on one same day. Manufacturing date code meaning: YYYY/MM/DD (D: Day / M: Month / Y: Year).
- Downwards distribution is traceable through our ERP system and shipment documents, via the batch code of every finished product; every customer and delivery address can be identified. Upwards traceability is also guaranteed – all suppliers of raw materials, and incoming data (suppliers, delivery dates, product, quantity) can be traced back.

### Label Specimen

| Field               | Data                              |
|---------------------|-----------------------------------|
| Product name        | Vitamin K2 (MK-7) oil             |
| Specification       | 10,000 ppm VK2 in g/MCT = 10 mg/g |
| Batch No            | KYVKM2025122401                   |
| Date of Manufacture | 2025-12-24                        |
| Expiry Date         | 2027-12-23                        |
| Net Weight          | 1 kg/Bottle   10 kg/Carton        |
| Origin              | China                             |
| Shelf life          | 2 Years                           |

\* Labeling may differ depending on local regulation.

## 5. PRODUCT STATEMENTS

### 5.1 Origin & Natural Statement

#### ORIGIN & NATURAL STATEMENT

Vitamin K2 (MK-7) MCT oil is processed through a fermentation process; the content is Vitamin K2 (MK-7)  $\geq 1.0\%$  and MCT Oil  $\leq 99.0\%$ . Vitamin K2 (MK-7) MCT oil is a natural and non-modified raw material. KEEP INGREDIENTS' materials are from China (except some special requests from our customers), and Vitamin K2 (MK-7) MCT oil is processed in China. We process Vitamin K2 (MK-7) MCT oil through common and usual methods; its structure is not chemically modified as it matches the Food Chemical Codex identification standards.

**Olivia Han**

Quality Assurance Manager – Food Division

### 5.2 Purity Statement

#### PURITY STATEMENT

VK2 MK7 mixed with MCT Oil complies with the requirements laid down in Regulation (EC) No 231/2012.

**Olivia Han**

Quality Assurance Manager – Food Division

### 5.3 Non-GMO Statement

#### NON-GMO STATEMENT

VK2 MK7 mixed with MCT Oil was not produced through the use of Genetically Modified Organisms, GMO-derived raw material or any genetic engineering methods. It complies with the EU/GM Regulation (EC) No 1829/2003 on genetically modified food and feed, and Regulation (EC) No 1830/2003 concerning the traceability and labelling of GMO and the traceability of food and feed products produced from GMO. VK2 MK7 mixed with MCT Oil is therefore considered as “conventional” and non-GMO; our customers are not supplied with GMO or GMO-derived material.

\* This is based on our suppliers' statements and on our manufacturing process.

**Olivia Han**

Quality Assurance Manager – Food Division

### 5.4 BSE/TSE Statement

**BSE/TSE STATEMENT**

VK2 MK7 mixed with MCT Oil manufactured by KEEP INGREDIENTS does not contain any raw material produced from animal- or human-derived origin, nor does it come into contact with animal- or human-derived materials during manufacture. VK2 MK7 mixed with MCT Oil complies with Regulation (EC) No 999/2001. KEEP INGREDIENTS thus takes the position that this product is free from transmissible spongiform encephalopathies.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.5 Allergen Statement**

VK2 MK7 mixed with MCT Oil does not contain any of the allergens as listed in Annex II of Regulation (EC) No 1169/2011 on the provision of food information to consumers. Allergens listed below (+: presence, - : absence):

| * Allergen                                                                                                                                         | In product | In factory | Cross-contamination risk |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|--------------------------|
| Cereals containing gluten (wheat, rye, barley, oats, spelt, kamut or their hybridised strains) and products thereof                                | -          | -          | No                       |
| Crustaceans and products thereof                                                                                                                   | -          | -          | No                       |
| Eggs and products thereof                                                                                                                          | -          | -          | No                       |
| Fish and products thereof                                                                                                                          | -          | -          | No                       |
| Peanuts and products thereof                                                                                                                       | -          | -          | No                       |
| Soya and products thereof                                                                                                                          | -          | -          | No                       |
| Milk and products thereof (lactose included)                                                                                                       | -          | -          | No                       |
| Nuts (almond, hazelnut, walnut, cashew, pecan, Brazil, pistachio, macadamia, chestnut, pine nut, hickory nut, Queensland nut) and products thereof | -          | -          | No                       |
| Celery and products thereof                                                                                                                        | -          | -          | No                       |
| Mustard and products thereof                                                                                                                       | -          | -          | No                       |
| Sesame seed and products thereof                                                                                                                   | -          | -          | No                       |
| Sulphur dioxide and sulphites at concentrations > 10 mg/kg or 10 mg/l expressed as SO <sub>2</sub>                                                 | -          | -          | No                       |
| Lupine and products thereof                                                                                                                        | -          | -          | No                       |
| Shellfish and products thereof                                                                                                                     | -          | -          | No                       |
| Maize and products thereof                                                                                                                         | -          | -          | No                       |
| Nut oil or derivatives                                                                                                                             | -          | -          | No                       |
| Peanut oil and derivatives                                                                                                                         | -          | -          | No                       |
| Seed oil and seed oil derivatives                                                                                                                  | -          | -          | No                       |
| Palm oil and derivatives                                                                                                                           | -          | -          | No                       |
| Antibiotics                                                                                                                                        | -          | -          | No                       |
| Aspartame                                                                                                                                          | -          | -          | No                       |
| Preservatives (incl. BHA/BHT, benzoic acid)                                                                                                        | -          | -          | No                       |
| Caffeine                                                                                                                                           | -          | -          | No                       |

| * Allergen                              | In product | In factory | Cross-contamination risk |
|-----------------------------------------|------------|------------|--------------------------|
| Artificial flavours / colour dyes       | -          | -          | No                       |
| Natural flavours / colour dyes          | -          | -          | No                       |
| Flavour enhancers (e.g. glutamate, MSG) | -          | -          | No                       |
| HVP/TVF                                 | -          | -          | No                       |
| Hydrogenated oil/fat                    | -          | -          | No                       |
| Monochloropropanols                     | -          | -          | No                       |
| Phenylalanine                           | -          | -          | No                       |
| Polyols (incl. sorbitol)                | -          | -          | No                       |
| Sweeteners                              | -          | -          | No                       |
| Alcohol                                 | -          | -          | No                       |
| Diacetyl                                | -          | -          | No                       |

Soy: soybean powder is used as substrate for *B. subtilis natto* and is removed during the final extraction, purification and filtration processes. The sum of soybean proteins is analysed by ELISA method and is less than 5 ppm. When an allergen is marked "present" in the product, no limits (min or max) are given. We recommend users of VK2 MK7 mixed with MCT Oil to check in their own country the legislation on the labelling of these allergen sources and to undertake some tests on their finished products.

#### Olivia Han

Quality Assurance Manager – Food Division

### 5.6 Elemental Impurities / Residual Solvents Statement

#### ELEMENTAL IMPURITIES / RESIDUAL SOLVENTS STATEMENT

No solvents (Class 1, 2 or 3) are used in the fermentation-based production of Natural Vitamin K2 MK7 & MCT Oil Blend. The product complies with ICH Q3D Guidelines for Elemental Impurities and EMEA/CHMP/SWP/4446/2000 Guideline on the Specification Limits for Residues of Metal Catalysts or Metal Reagents (and European Pharmacopoeia, Chapter 5.4), or USP <232>, <233>, <467>.

#### Olivia Han

Quality Assurance Manager – Food Division

### 5.7 Non-Doping Agents Statement

#### NON-DOPING AGENTS STATEMENT

Natural Vitamin K2 MK7 & MCT Oil Blend does not contain substances as defined in the current NFL/NFLPA banned substances list and the World Anti-Doping Agency (WADA) prohibited list, in particular: stimulants, narcotics, steroids, diuretics, masking agents, beta-2-agonists and beta-blockers. Please note that no analysis is performed on these molecules.

#### Olivia Han

Quality Assurance Manager – Food Division

### 5.8 Nanomaterials Statement

**NANOMATERIALS STATEMENT**

Natural Vitamin K2 MK7 & MCT Oil Blend does not contain nanomaterials according to the definitions in French decree 2012-232 and Regulation (EU) No 2015/2283.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.9 Sewage Sludge Statement****SEWAGE SLUDGE STATEMENT**

Natural Vitamin K2 MK7 & MCT Oil Blend is not grown, fertilized or produced with the addition of sewage sludge.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.10 Contaminants Statement****CONTAMINANTS STATEMENT**

Each batch of Natural Vitamin K2 MK7 & MCT Oil Blend produced by KEEP INGREDIENTS complies with the heavy metals specifications set in Regulations (EC) No 231/2012 and No 2023/915 and in the Food Chemical Codex monograph (see Section 2.2), with the State of California's Proposition 65 current list of chemicals, and with the mycotoxin, PCB, dioxin, PAH, pesticide, radioactivity (Cs 134 + Cs 137 < 50 Bq/kg) and melamine controls described in Section 2.3.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.11 REACH Statement****REACH STATEMENT**

According to Article 2(5) of Regulation (EC) No 1907/2006, the provisions of Titles II, V, VI and VII of the Regulation are not applicable to substances used in food products, including when they are used as additives or flavours. KEEP INGREDIENTS certifies that the main provisions of Regulation (EC) No 1907/2006, in particular registration and evaluation, do not apply to Vitamin K2 MK7 & MCT Oil Blend. Title VII, dealing with the authorization procedure, only applies to dangerous products and thus is not applicable to this product. The product is not classified according to Regulation (EC) No 1272/2008 (CLP/GHS). Considering the raw material and the manufacturing process, the presence of substances of very high concern (SVHC) as defined in Article 57 (Annex XIV) and identified by ECHA is not expected. Upon request, a Safety Data Sheet compliant with Regulation (EC) No 1907/2006 will be provided.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.12 Non-Ionisation / Irradiation Statement**

**NON-IONISATION / IRRADIATION STATEMENT**

The raw materials we use are not irradiated, and we do not add, at any step of the process, any irradiated raw material. Natural Vitamin K2 MK7 & MCT Oil Blend is not treated by ionizing radiation and is compliant with European Directives 1999/2/EC and 1999/3/EC.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.13 Ethylene Oxide (ETO) Statement****ETHYLENE OXIDE / ETO STATEMENT**

The raw materials we use in our products are not treated by ethylene oxide. The finished product is not treated by ethylene oxide. Therefore, every batch of Natural Vitamin K2 MK7 & MCT Oil Blend produced by KEEP INGREDIENTS is free from ethylene oxide.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.14 Packaging Food Contact Statement****PACKAGING FOOD CONTACT STATEMENT**

We confirm that the packaging we use for Natural Vitamin K2 MK7 & MCT Oil Blend comes from approved suppliers whose products are compliant with the following: EU Framework Regulation (EC) 1935/2004 on materials and articles intended for food contact; Regulation (EC) 10/2011 on plastic materials and articles intended to come into contact with food; Directive (EC) 2023/2006 on good manufacturing practice for materials and items meant to come into contact with food (current edition); the recommendations of the Bundesamt für Risikobewertung (BfR) for German customers; and American regulation FDA 21 CFR.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.15 Gluten Statement****GLUTEN STATEMENT**

KEEP INGREDIENTS does not add gluten during its manufacturing process and no cross-contamination is foreseeable. Consequently, we certify that the gluten content in Natural Vitamin K2 MK7 & MCT Oil Blend is below the current detection limit.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.16 Animal Non-Testing Statement**

**ANIMAL NON-TESTING STATEMENT**

Natural Vitamin K2 MK7 & MCT Oil Blend is made through a fermentation process from Natto (*Bacillus subtilis*). To our knowledge, no animal testing has been conducted on this product or its raw materials for food or cosmetic purposes, either during production or in compliance assessments.

**Olivia Han**

Quality Assurance Manager – Food Division

**5.17 Continuing Guarantee****CONTINUING GUARANTEE**

Natural Vitamin K2 MK7 & MCT Oil Blend is produced in a food-safety compliant facility and meets the chemical specifications of the Food Chemicals Codex and the U.S. Pharmacopeia – National Formulary. For the purposes of Sections 402 and 403 of the U.S. Federal Food, Drug, and Cosmetic Act, KEEP INGREDIENTS guarantees that the product is not adulterated or misbranded when shipped, and that, as of the date of each shipment, it may be introduced into interstate commerce under the current provisions of the Act. This guarantee continues with the product only as long as it remains in the original unopened container from KEEP INGREDIENTS' plant, and shall be void where any particular use by you or your customer is not in accordance with the requirements of the Federal Food, Drug, and Cosmetic Act or applicable state law. This Guarantee shall be a continuing Guarantee and shall remain in effect until such date as you receive from KEEP INGREDIENTS notice of its revocation.

**Olivia Han**

Quality Assurance Manager – Food Division

6. NUTRITIONAL VALUES

Natural Vitamin K2 MK7 & MCT Oil Blend (per 100 g product). Based on COA, TDS & EU Regulation (EU) No 1169/2011.

| Nutrient             | Content (per 100 g)  |
|----------------------|----------------------|
| Energy               | 3760 kJ (≈ 899 kcal) |
| Total Fat            | 99.5 g               |
| - Saturated Fat      | 60.0 g               |
| - Trans Fat          | 0 g                  |
| Total Carbohydrates  | 0 g                  |
| - Sugars             | 0 g                  |
| Protein              | 0.0 g                |
| Sodium               | < 5 mg               |
| Moisture & Volatiles | 0.2 g                |
| Ash                  | ≤ 0.1 g              |
| Vitamin K2 (MK-7)    | 10,900 µg            |

\*\* All values derived from product COA test results and TDS specifications.

## 7. MANUFACTURING, STORAGE & RELEASE SITE INFORMATION

### 7.1 Key Management Systems & Policies

| Standard / Requirement                                                                 | Implemented                                           |
|----------------------------------------------------------------------------------------|-------------------------------------------------------|
| ISO 9001:2015 – Quality System (documents control, management reviews, quality policy) | Yes                                                   |
| Global Standard for Food Safety (GFSI recognized)                                      | Yes                                                   |
| Certifications                                                                         | ISO 14001, ISO 9001, ISO 45001, Kosher, HALAL         |
| EU Feed Additives Quality System – FAMI-QS                                             | Yes                                                   |
| Ethics, responsible sourcing and practices                                             | Yes                                                   |
| Safety Policy / Food defense policy                                                    | Yes                                                   |
| C-TPAT membership                                                                      | Yes                                                   |
| Environmental policy (ISO 14001)                                                       | Yes                                                   |
| Halal / Kosher certification                                                           | Yes                                                   |
| Vegetarian and/or vegan suitability                                                    | Yes (no animal-derived material used in the plant)    |
| Plant registration by an authority (e.g. FDA)                                          | Yes                                                   |
| Insurance / Product liability                                                          | Yes                                                   |
| Change control management                                                              | Yes                                                   |
| Regulatory affairs management                                                          | Yes                                                   |
| Crisis management procedure                                                            | Yes                                                   |
| Business Continuity Plan                                                               | Yes (stocks in our plant and subsidiaries warehouses) |
| Training procedure (induction and follow-up)                                           | Yes                                                   |
| Arrangements for the absence of key staff                                              | Yes (back-up documented)                              |
| Complaint handling procedure                                                           | Yes (2-24 work hours for a solution)                  |
| Product recall procedure                                                               | Yes (tested once per year)                            |
| Corrective & preventive actions                                                        | Yes (tracked, implemented, verified)                  |
| Audits (external/internal)                                                             | Yes (third-party and customer audits)                 |
| Continuous improvement                                                                 | Yes                                                   |

## 7.2 Manufacturing Organization & Control

| Standard / Requirement                                 | Implemented                                                                            |
|--------------------------------------------------------|----------------------------------------------------------------------------------------|
| Number of employees                                    | 33 in sales office; over 200 in factory                                                |
| Work in shifts                                         | Yes – 24/24 h, 7/7 d, one supervisor per shift                                         |
| Plant dedicated to one type of products?               | No                                                                                     |
| Planned maintenance (buildings, surroundings, process) | Yes                                                                                    |
| Plant organisational chart                             | Yes                                                                                    |
| QC/QA independent from production management           | Yes (QA team for the site)                                                             |
| Products specifications & safety data sheets           | Yes (TDS = standard specifications; customer-specific requirements can be implemented) |
| Goods inwards / outwards control                       | Yes (raw materials and packaging)                                                      |
| Warehousing GMP                                        | Yes (cleaning plan)                                                                    |
| Production orders management                           | Against customer orders                                                                |
| Main processing technology on site                     | Fermentation process                                                                   |
| Process critical parameters monitored                  | Yes (monitored and recorded)                                                           |
| Batch records                                          | Yes (per batch; each step documented)                                                  |
| Written work instructions                              | Yes                                                                                    |
| Label control                                          | Yes (mostly automated through our ERP)                                                 |
| Product sampling procedure                             | Yes (representative, traceable samples)                                                |
| Product in-process controls                            | Yes (control plan and production labs)                                                 |
| Self-inspection & internal audits                      | Yes (every 3 weeks for production; once per year per department)                       |
| Weight and measures                                    | Yes (compliant with standard)                                                          |
| Handling of nonconforming product                      | Yes (proper identification and “on-hold” stock status)                                 |
| Specific area for NC products                          | Yes                                                                                    |
| Rework                                                 | Yes (as per our procedure)                                                             |
| Waste management                                       | Yes (waste water station on site)                                                      |

| Standard / Requirement                  | Implemented                                                                               |
|-----------------------------------------|-------------------------------------------------------------------------------------------|
| Product release                         | Yes (computerized system)                                                                 |
| Full traceability (upstream/downstream) | Yes (unique batch number; packaging traceability included; traceability tested each year) |

### 7.3 Quality Control

| Standard / Requirement                                 | Implemented                                                                      |
|--------------------------------------------------------|----------------------------------------------------------------------------------|
| Own laboratory for routine and product release testing | Yes (under ISO 9001:2015; inter-labs tests for micro)                            |
| Laboratory away from production facilities             | Yes (separate building; restricted access to micro-lab)                          |
| External laboratory for non-routine testing            | Yes (contaminants / specific microbial requests – ISO 17025 accredited)          |
| Calibration procedure                                  | Yes (traceable to national standards)                                            |
| Use of officially approved methods                     | Yes (otherwise historically approved methods)                                    |
| Suppliers audit & approval                             | Yes (supplier assessed each year; audit if relevant; list of approved suppliers) |
| Raw material testing and release                       | Yes (raw material specifications)                                                |
| Finished product testing                               | Yes (against control plans, incl. microbial tests)                               |
| Testing records                                        | Yes (hard copies and LIMS system)                                                |
| Certificate of Analysis with each released batch       | Yes (managed by QC unit)                                                         |
| Sample retention                                       | Yes (per batch, shelf-life + 2 years)                                            |

## 8. GMPs AND FOOD SAFETY STANDARDS

### 8.1 GMP & Food Safety Practices

| Standard / Requirement                                     | Implemented                                                                                     |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Good hygiene (GMP) and safety practices                    | Yes (10 GMP lines)                                                                              |
| Food hygiene training to the staff                         | Yes (recorded)                                                                                  |
| Staff illness policy / procedure for reporting illness     | Yes (health checks as per Chinese law; report to manager and QA)                                |
| Prerequisite programs                                      | Yes (as per ISO 14001, ISO 9001, ISO 45001)                                                     |
| Utilities management                                       | Yes (sub-contracted)                                                                            |
| Water monitoring                                           | Yes (potable water tested for microbiological safety)                                           |
| Environment Monitoring Program                             | Yes (mostly weekly, incl. water and food contact; Salmonella tested near food contact surfaces) |
| Plant designed for food handling                           | Yes (floors, utilities, stainless steel equipment)                                              |
| Zoning of production areas                                 | Yes (packaging is the high care area)                                                           |
| Formal hygiene instructions for visitors / sub-contractors | Yes                                                                                             |
| HACCP implemented                                          | Yes (meets the requirements of the 7 Codex principles)                                          |
| HACCP reviewed                                             | Yes (yearly, by multidisciplinary team led by QA)                                               |
| HACCP & hygiene internal audits                            | Yes (once a month)                                                                              |

Hazards taken into account: biological (including pathogens) / physical / chemical / allergens.

## 8.2 Process & Facility Controls

| Standard / Requirement                                    | Implemented                                                                                                  |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Heat Treatment                                            | Yes (CCP)                                                                                                    |
| Metal detection                                           | Yes (CCP)                                                                                                    |
| CCP checked before batch release?                         | Yes                                                                                                          |
| Magnets                                                   | Yes                                                                                                          |
| X-Rays                                                    | No                                                                                                           |
| Irradiation                                               | No                                                                                                           |
| Glass / Hard plastic control                              | Yes (monthly audit)                                                                                          |
| Wood policy                                               | No (wooden pallets)                                                                                          |
| Allergen control                                          | Yes                                                                                                          |
| Laundry contractor                                        | Yes (food-type clothes for the staff)                                                                        |
| Goods unloaded and loaded under cover                     | Yes (with cleanliness and hygiene checks)                                                                    |
| All products filtered and screened?                       | Yes                                                                                                          |
| Segregation control for hazards / cross-flows             | Yes (mix-up avoided through proper organisation, identification and location handling; transportation incl.) |
| Documented cleaning procedures                            | Yes (master cleaning schedule)                                                                               |
| Cleaning chemicals approved for use                       | Yes                                                                                                          |
| CIP systems implemented                                   | Yes (where necessary)                                                                                        |
| Cleaning contractor                                       | Yes (GSF / for non-production areas)                                                                         |
| Pest control contractor / records maintained & signed-off | Yes                                                                                                          |
| Warehouse T°C / %RH monitoring                            | Yes                                                                                                          |
| Transport food safety rules                               | Yes (per our transport specifications)                                                                       |

**Olivia Han**

Quality Assurance Manager – Food  
Division

Authorized signature & company stamp

**KEEP INGREDIENTS CO. LTD**

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