HIGH QUALITY FOOD (KMÉ)

CERTIFICATION MARK SCHEME

SPECIFIC CERTIFICATION REQUIREMENTS

Egg powder

Budapest, October 2025

Egg powder

Applications for the KMÉ or the KMÉ Gold Grade certification mark may be submitted for egg powder obtained through the homogenisation, pasteurisation and spray-drying of egg juice obtained from the processing of eggs that are produced by hens of the species *Gallus gallus*, as well as of the various components of eggs or of mixtures of eggs, after removal of the shell.

The KMÉ certification mark may only appear on whole egg powder, egg white powder or egg yolk powder (hereinafter 'egg powder') which has been produced in an approved establishment. Egg powder may come from the processing of grade A eggs which have been certified as fit for direct human consumption by testing in an approved establishment.

The product must comply with the legal requirements in force, including animal welfare, process hygiene and labelling requirements for the keeping of animals and the packaging of egg powder.

Egg powder may not be placed on the market with a KMÉ certification mark if:

- the eggs come from an egg-producing holding which, for any reason, is subject to animal health restrictions,
- the eggs come from a parent stock farm,
- it is produced from cracked or broken eggs,
- if, prior to placing on the market, a sample taken from the batch of egg powder during self-inspection was subjected to a microbiological for Salmonella and proved positive.

Animal husbandry-related requirements

Livestock shall be fed as follows:

- The feed mixtures shall contain only cereals and products derived from cereals that can be used in GMO-free production.
- Cereals may be referred to as feed ingredients in the labelling of egg powder packages only if they represent at least 60% of the declared weight of the feed formula.
- If reference is made to a specific cereal, it shall account for at least 30% of the feed formula used. If more than one cereal is referred to separately, each of them shall account for at least 5% of the feed formula.
- The producer may only use feed containing not more than 2.5 mg/kg of deoxynivalenol (DON-toxin) for the feeding of hens. The producer shall arrange for the checking of the deoxynivalenol content of the feed compound that it uses for the hens, which shall be tested once a year during the period while the egg-laying hens are kept in production. Sampling shall take place after the egg-laying hen has been reclassified. Sampling shall be carried out using the sampling procedure (or equivalent sampling procedure) provided for in Regulation (EC) No 152/2009 in a laboratory accredited to perform DON testing.

- Testing of the drinking water of animals in a laboratory accredited for drinking water testing once a year. The producer shall use water of a quality that meets the requirements of Government Decree No 5/2023 of 12 January 2023 on the quality requirements for drinking water and the inspection procedure to water the hen population.

Water used for drinking shall be considered to be of drinking water quality,

a) if the animals are not supplied with water from a mains water supply:

- the water source is well designed to prevent the contamination of the drinking water,
- the test result of the accredited laboratory is available, showing that the water used for watering meets the drinking water quality requirements with regard to the limit values set out in Annex 1 to Government Decree No 5/2023 of 12 January 2023 on the quality requirements for drinking water and the inspection procedure, depending on the method of obtaining the water, for the following parameters:

1. Microbiological tests: E. coli, colony count at 22°C,
2. Chemical tests: nitrite, permanganate index, conductivity,
3. Organoleptic test: colour, smell

or

b) if the animals on the holding are supplied with water from a mains water supply, a written declaration from the water supplier that the water supplied is of drinking water quality.

Medicinal products within the area of the farm shall be used in justified cases, only when necessary, and their application shall be documented. A resistance test shall be performed before or at the latest parallel to the start of the treatment.

Animal health requirements:

- The egg-producing farm participates in national eradication programmes, in particular the Salmonella eradication programme. The farm has a valid official certificate stating that the animals producing table eggs are free from *S. enteritidis* and *S. typhimurium*.

Specific requirements for establishments producing egg powder:

- The shells of eggs used for the production of egg powder shall be fully formed and free of cracks.
- Eggs shall not be cracked until they are clean and dry.
- Eggs shall be cracked with minimum contamination, in particular by ensuring adequate separation from other operations.

- The contents of the egg shall not be obtained by centrifuging or pressing the egg. The egg white remaining in egg shells intended for human consumption cannot be obtained by centrifugation.
- After cracking, all parts of the egg shall be processed as quickly as possible to avoid microbiological hazards or to reduce them to acceptable levels. Unless processing is carried out immediately after cracking, the egg juice used as a raw material for egg powder shall be stored at a temperature below 4°C. The storage time at 4°C shall not exceed 48 hours before processing.
- Only table hen eggs which have been found free from residues above the maximum residue limit (residue) in national official monitoring sampling and in laboratory testing carried out by the operator as part of self-monitoring may be used for the production of egg powder.

Requirements for egg powder

Egg powder may only bear the KMÉ trade mark if no residue above the limit value (residue) has been detected in the product during national official monitoring sampling and laboratory testing carried out by the undertaking as part of self-monitoring.

Quality characteristics:

1. The concentration of 3-OH-butyric acid shall not exceed 10 mg/kg in the dry matter content of unmodified egg products.
2. The lactic acid content of the raw material used for the manufacture of egg products shall not exceed 1 g/kg of dry matter.
3. The quantity of egg residues, shells and other parts in processed egg products shall not exceed 100 mg/kg.

Physical and chemical parameters

Whole egg powder

- Colour: light yellow, free of foreign matter, dirt, burnt particles
- Taste, smell: characteristic of whole egg powder, pleasant, free of foreign taste and odour
- Consistency: uniform, any particles can be easily crushed with a finger
- Moisture content: maximum 5%
- Solubility: at least 85%

Egg yolk powder:

- Colour: yellow, free of foreign matter, dirt, burnt particles
- Taste, smell: typical of egg yolk powder, pleasant, free of foreign taste and smell
- Consistency: uniform, any particles can be easily crushed with a finger
- Moisture content: maximum 5%
- Solubility: at least 70%

Egg white powder:

- Colour: white, free of foreign matter, dirt, burnt particles
- Taste, smell: typical of egg white powder, pleasant, free of foreign taste and smell
- Consistency: uniform, any particles can be easily crushed with a finger
- Moisture content: maximum 5%
- Solubility: at least 70%

Microbiological characteristics:

Food safety criterion:

Salmonella: n=5 c=0 limit: 0/25 g

Process hygiene criterion:

Enterobacteriaceae: n=5 c=2 m=10/g M=10^2/g
S. aureus n=5 c= 2 m=10^2 M=10^3
Microbial count n=5 c=2 m=10^4 M=10^5
E.coli n=5 c=2 m<1 M <10
E. faecalis n=5 c=2 m=10^3 M=10^4
Mould n=5 c=1 m=10^2 M=10^3

In the context of self-monitoring, the microbiological conformity of the egg powders produced is mandatory once a month (5 elemental samples, for microbes specified in the specification).

Storage: in a cool, dry place, protected from direct sunlight.

Optional elements

Applications for the High Quality Food (KMÉ) and High Quality Food Gold Grade trademarks may be submitted for products that, in addition to the above-mentioned mandatory requirements, also comply with at least one point in each of the optional element categories of I and II.

I. Production process

Self-monitoring

1. Conducting regular supplier audits in a documented manner, with a frequency determined on the basis of a risk assessment pursuant to the criteria defined in the framework of self-monitoring, so that each supplier is subject to inspection at least once over a period of 3 years.
2. The use of documented technological processes during the production of the product, which ensure that the general and specific requirements of the KMÉ are met, errors that may occur are detected, and the necessary corrective measures are taken.

3. In the facility, the surfaces that come into contact with the product during the production process (e.g. tools, equipment, containers, etc.) and the cleanliness of the production environment shall be checked at least once every three months: a 10x10 cm area of the surface that comes into direct contact with food, or the entire surface of tools smaller than this, shall be inspected after cleaning and disinfection. Limit: When tested by impression sampling, the number of micro-organisms per 1 cm2 surface area may be 1 to 3, per 100 cm2 surface area 250, in the case of bottles, the number of micro-organisms per 1 cm^3 volume may be 1 to 3, per 100 cm^3 volume up to 300, using a volume of sterile rinsing liquid equal to 10% of the cube content.
4. Where a treatment to reduce the surface area of eggshells by germ reduction or disinfection is authorised in the egg product manufacturer, the effectiveness of the treatment is checked quarterly by an external laboratory test.
5. Testing of the raw material for microbiological criteria (Salmonella, S. aureus, Enterobacteriaceae, microbial counts, E. coli, E. faecalis, moulds) carried out at least every six months in the establishment producing the egg product, either by an external laboratory or by an approved in-house laboratory, as part of a self-monitoring system. The limits are the same as those described above for egg products.
6. Compliance with microbiological parameters for the KMÉ trade mark product is checked quarterly by an external accredited laboratory.
7. Trend analysis within the framework of self-monitoring: production of a quality control chart with graphical representation of microbiological and, if undertaken, analytical values (e.g., omega-3 fatty acid, vitamin E content, etc.) with the definition of guideline, warning and/or limit values. These values shall be compared to the actual data collected from self-monitoring, and, if necessary, appropriate measures shall be taken.
8. In the establishment producing the egg product, operation of food safety and quality management systems certified by an independent body (e.g. IFS, ISO 22000, BRC, BRCGS FOOD, FSSC 22000), possession of a certification.
9. Eggs are transported to the egg packer and processing site by insulated transport vehicles.
10. Use of raw materials with a KMÉ trademark.

Animal husbandry

11. The farm has a valid Global GAP animal welfare certification.
12. The farm receives EU funding for animal welfare.
13. Where the laying hen housing method is indicated on the packaging of the egg product, a documented review of compliance with the relevant legal requirements shall be carried out at the time of each introduction. Proof of this shall be available for the raw material at the place of manufacture of the egg product.
14. A documented review of compliance with the legal requirements applicable to the method of feeding specified on the pack of eggs[1], if indicated, on a quarterly basis.

[1] As required by the livestock feeding requirements.

15. Feeding with GMO-free production feed.
16. The egg production plant has a certified quality assurance system.
17. Performance of certified organic farming at the laying farm/egg production site. (not optional together with point 38)
18. Participation in the agri-environmental management scheme (AKG programme).
19. The operator of the establishment shall ensure that products derived from eggs from animals from an epidemiological unit which have received antibiotics during the rearing period and after one week of age do not bear the KMÉ trade mark. The farm has a certified quality assurance system.
20. Requirements for feeding, drinking and perching:

	A	B	C
1.	Technology		Requirement For 1 hen
2.	alternative housing	feeder: straight circular	 10.5 cm 4.5 cm
		drinker: continuous circular with valves, cups drinking point perch	 3 cm 1.5 cm 9 hens/valve or cup hen/2.5 cups or valves availability not less than 15.1 cm
3.	upgraded cage	perch feeder drinker	not less than 15.1 cm 12.5 cm hen/2.5 cups or valves availability

Hens shall be provided with a suitable perch, without steel spikes, with a minimum space of 15.1 cm per hen. No perch shall be placed above the laying nest.

21. Microclimate requirements (ammonia, temperature, relative humidity):
    1. Measured at head height of chickens, ammonia (NH_3) concentration does not exceed 20 mg/kg and the concentration of carbon dioxide (CO_2) does not exceed 3,000 mg/kg.
    2. If the outdoor temperature is above 30 °C in the shade, the indoor temperature does not exceed the outdoor temperature by more than 3 °C.
    3. If the outdoor temperature is below 10 °C, the average relative humidity measured in the poultry house for 48 hours does not exceed 70 %.
22. Specification of requirements for laying nests:
    Individual laying nest: There is at least one laying nest per 7 animals.
    Common laying nest: max. Up to 120 animals can be calculated for a common laying nest of at least 1 m^2. Hens do not have to stay in the laying nest at night. The laying nests are

free from moisture and contamination. Comprehensive cleaning of laying nests at least for each service period.

23. Barn illumination requirement: provision of an uninterrupted night rest period of at least 8 hours without artificial illumination. Illumination of 5-20 Lux is provided, tailored to the 24-hour circadian rhythm.

24. The provision of raw protein-containing feed adjusted to age and production level, which is less burdensome for the animals, and helps reduce the ammonia content in the barn and reduce the N-load of the environment.

II. Sustainability

Environmental protection (reduction of environmental footprint, green logistics)

25. Application of eco-friendly manure treatment methods.
Note: The undertaking has a process in place to identify, assess and respond to environmental and social risks and opportunities. (environmentally friendly manure storage, amount of manure applied,)

- **Use of environment friendly, renewable energy resources**

26. The plant/applicant derives a specific part of its energy from renewable energy sources (e.g. thermal water, geothermal heat, solar panels, biogas) in the production and preparation process.
(The undertaking has a certified green product, green service, or sells green energy /solar energy, wind energy, hydropower, biogas, geothermal energy/.
Document to demonstrate the distribution of total and renewable electricity consumption in the last financial year).

- **Use of sustainable management inputs/technological methods**

27. More efficient resource management, material, energy and water management, and modernisation of processing technologies that reduce environmental impact (for example regenerative heat recovery, waste heat recovery, the improvement of the efficiency of the refrigeration systems and the reduction of energy consumption).
(It shall be demonstrated
— whether it has environmental compliance/certification
— whether it uses a qualified green product or service for its operation.
It has a process in place to identify, assess and respond to environmental and social risks and opportunities.
It is necessary to examine what proportion of the materials used by the undertaking or by the undertakings in its value chains are recycled, reclaimed, renewable and non-renewable raw materials /circular economy/.)

28. Energy recovery system on production machines.

(For example, the use of any equipment that captures and transmits the waste heat of the compressor. Recycling of thermal energy for other industrial processes that require heat or steam).

29. Application of an Environmental Management System (EMS) or EMAS (Eco-Management and Audit Scheme) in accordance with standard MSZ EN ISO 14001:2015, certifying environmental compliance.
    (Preparation of annual reports which provide information about the energy use, waste management, water use and other environmental impacts.)

30. Certified and regularly used environmentally friendly and/or water-saving cleaning products and detergents.
    (Certifications, safety data sheets, specifications, certification marks on the packaging. Certificates from certification bodies, e.g. Ecocert, Green Certification, Breeam, Leed.)

31. Utilization of by-products, minimisation of product and material losses.
    (The undertaking has a process in place to identify, assess and respond to environmental and social risks and opportunities. The undertaking uses raw materials, secondary raw materials produced from waste in accordance with circular economy principles, and the circular economy requirements are taken into account in the design of the product, including the packaging of the product.)

32. Operation of an environmentally sound waste management system. Separate waste collection and recycling, in a documented form.
    (The undertaking is authorised to handle, collect, transport, store and dispose of persistent organic pollutants in a non-polluting way once they become waste.)

33. Efficient and environmentally friendly waste water treatment technology (e.g. biological waste water treatment).

34. Verified decrease in specific water use.
    (E.g. use of effluent hot water from installations for secondary cleaning tasks, drip irrigation, rainwater collection and recycling, grey water recycling.)

- **Green rating**

35. Official proof of a recognised, certified sustainability rating in accordance with the EU legislation in force (e.g. but not limited to: EcoVadis, B Corp, BREEAM, LEED, ISCC).

36. Green sourcing policy, documented: prioritising suppliers that have made sustainability investments.
    (The undertaking makes its suppliers carry out an environmental assessment of the products and/or services. Demonstration of the proportion in which suppliers use, for example, renewable energy sources, whether they take building energy aspects into account, whether

they operate an environmentally sound waste system, minimise the environmental impact of the logistics network and that of transport.)

37. The undertaking has a Science Based Target Initiative (SBTI) commitment.
38. The raw material used in the production of the product comes from certified organic or extensive farming or has another scientifically verifiable reduced environmental footprint. (not optional together with point 17)
    (E.g. products labelled as organic, environmentally friendly product or service.)

- **Use of eco-friendly packaging solutions**

39. Application of an eco-friendly packaging solution for packaged products (reduced packaging size or alternative packaging materials e.g. compostable /FSC or PEFC logo/).
40. Suppliers of primary packaging material that come into contact with the product shall have BRC or IFS PACsecure certification.

- **Transport**

41. The main component comes to the processing plant from own farm or from within a distance of 100 km.
    (Place of production, the production and/or processing site may be located within a distance of 100 km.)
42. Feed is delivered from within a distance of 100 km.
43. Live animals are transported within a radius of 100 km.
44. Transport optimisation, route planning to reduce emissions.
    (Lean & Green program)
45. The product shall be delivered to the consumer through a short supply chain.

Social aspects

46. Existence of SMETA (Supplier Ethical Data Exchange) audit.
47. Prevention of food waste through donation.
48. Prevention of food waste by preventing waste generation in production and logistics.