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OK Standards for

Organic Production and Processing

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Introduction

Organic farming is a sustainable form of agricultural production.

Organic farming promotes and improves biodiversity, biological cycles and soil biological activity. It is based on the minimal usage of resources outside the farm and on methods that restore, maintain and increase ecological harmony. Organic farming does not use synthetic chemical pesticides, herbicides and fertilizers, it relies on the development of healthy, fertile soil and the seasonal crop rotation. As an integral system, organic agriculture is based on a set of processes whose results are a sustainable ecological system, safe food, good nutrition, animal welfare and social justice.

Organic production is therefore more than a production system that includes or excludes certain inputs.

Organic production and processing is based on several important principles and ideas. Some of the objectives of organic production are:

- To produce sufficient quantities of high quality foods, fibers (cellulose) and other products;
- To recognize the wider sociological and ecological impact on organic production and processing system, as well as impact within them;
- To maintain and increase the long-term fertility and biological activity of the soil;
- To maintain and improve agricultural and natural biodiversity on farms and in the environment using sustainable production systems and preserving of plants and wildlife
- Promoting responsible use and conservation of water and life in it;
- To use renewable sources in production and processing systems and to avoid pollution and waste as much as possible.
- To support local and regional production and distribution;
- To create a harmonious balance between crop production and animal husbandry;
- To provide animals with living conditions that will enable them to express the basic needs of their natural behavior;
- To use biodegradable and recyclable materials for packaging;
- To ensure that everyone involved in organic production and processing has quality of life that meets their basic needs within a safe and healthy working environment;
- To support the establishment of a complete production, processing and distribution chain, which is socially just and ecologically responsible;
- To protect the inherited knowledge and traditional methods of production, to learn from them and to recognize their importance.

The Organska Kontrola Standards (OK Standards) is used for certification of organic production in BH and other third countries for sales of organic products both on local as well as on demanding EU and Swiss market.

The OK Standard establishes rules for organic production and certification, which are equivalent to the rules set by the Regulation of the EU and as such recognized by EC and Federal Office of Agriculture of Switzerland. The OK Standard is based on the IFOAM

Basic Standards and the Regulation (EC) No.834/2007 and Regulation (EC) No. 889/2008 for organic production. Standard combines these regulations and adapts them for application in BH and other third countries.

The OK Standards takes into account the specific conditions for organic production in BH and other non-EU counties and the stage of development of organic production.

Standard for the product intended to be sold in BH and other markets outside the EU

Under this heading in the OK standards are standards which can be used for sales in BH or in other countries but not on the EU market. The regulations and standards for organic production is sometimes unnecessary strict and theses proposals will make the development of organic production faster.

Scope of the OK Standard

This Standard outlines the minimum requirements for certification of organic production according OK Standards and use of OK and/or EU logo.

The OK Standards covers the areas of general organic management, crop production, mushroom production, animal production, beekeeping, wild collection, processing and preserving and labelling.

This Standard applies to the following products that carry, or are intended to carry, descriptive labelling referring to organic production methods or organic certification:

a. live or unprocessed agricultural products

b. processed agricultural products for use as food.

Definitions

Technical terms and are explained in the section on definitions below.

Definitions

Buffer zone

A clearly defined and identifiable boundary area bordering an organic production site that is established to limit application of, or contact with, prohibited substances from an adjacent area.

Certification

The procedure by which an independent third party gives written assurance that a clearly identified production or processing system is methodically assessed and conforms to specified requirements

Contamination

Pollution of organic product or land; or contact with any material that would render the product unsuitable for organic certification.

Conventional

Conventional means any material, production or processing practice that is not certified organic or organic "in-conversion".

Conversion period

The time between the start of the organic management and the certification of crops and animal husbandry as organic. The production must be registered to Organska Kontrola and the standards have to be followed during the conversion period.

Crop rotation

The practice of alternating the species or families of annual and/or biennial crops grown on a specific field in a planned pattern or sequence so as to break weed, pest and disease cycles and to maintain or improve soil fertility and organic matter content.

Direct source organism

The specific plant, animal, or microbe that produces a given input or ingredient, or that gives rise to a secondary or indirect organism that produces an input or ingredient

Food additive

An enrichment, supplement or other substance which can be added to a foodstuff to affect its keeping quality, consistency, colour, taste, smell or other technical property (For full definition, see Codex Alimentarius).

Genetic diversity

Genetic diversity means the variability among living organisms from agricultural, forest and aquatic ecosystems; this includes diversity within species and between species.

Genetic engineering

Genetic engineering is a set of techniques from molecular biology (such as recombinant DNA) by which the genetic material of plants, animals, micro-organisms, cells and other

biological units are altered in ways or with results that could not be obtained by methods of natural mating and reproduction or natural recombination.

Techniques of genetic modification include, but are not limited to: recombinant DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms do not include organisms resulting from techniques such as conjugation, transduction and natural hybridization.

Genetically Modified Organism (GMO)

A plant, animal, or microbe that is transformed by genetic engineering.

Green manure

A crop that is incorporated into the soil for the purpose of soil improvement. May include spontaneous crops, plants or weeds.

Homeopathic treatment

Treatment of disease based on administration of remedies prepared through successive dilutions of a substance that in larger amounts produces symptoms in healthy subjects similar to those of the disease itself.

Ingredient

Any substance, including a food additive, used in the manufacture or preparation of a food or present in the final product although possibly in a modified form.

Irradiation (ionizing radiation)

High energy emissions from radio-nucleotides, capable of altering a food's molecular structure for the purpose of controlling microbial contaminants, pathogens, parasites and pests in food, preserving food or inhibiting physiological processes such as sprouting or ripening.

Labelling

Any written, printed or graphic representation that is present on the label of a product, accompanies the product, or is displayed near the product.

Natural land

Land which is not farmed (under plough) and which is not treated with chemical fertilisers or chemical pesticides. Natural land can for example be forest, grassland or wetland used for grazing.

Operator

An individual or business enterprise, responsible for ensuring that products meet the certification requirements.

Organic seed and plant material

Seed and planting material that is produced under certified organic management

Parallel production

Any production where the same unit is growing, breeding, handling, preserving or processing the same products in both a certified organic system and a non-certified or non-organic system. A situation with "organic" and "in conversion" production of the same product is also parallel production. Parallel production is a special instance of split production.

Preserving

Means any action, different from farming and harvesting, that is carried out on products, but which does not qualify as processing as defined "Processing" in this Standard, including all actions referred to "*Unprocessed products*" as defined in this Standard and excluding packaging or labelling of the product.

Processing aid

Any substance or material, not including apparatus or utensils, and not consumed as a food ingredient by itself, intentionally used in the processing of raw materials, foods or its ingredients, to fulfil a certain technical purpose during treatment or processing and which may result in the non-intentional, but unavoidable presence of residues or derivatives in the final product.

Processing

Means any action that substantially alters the initial product, including heating, smoking, curing, maturing, drying, marinating, extraction, extrusion or a combination of those processes, including the use of substances referred in point 8.2.2. of OK Standard.

Processed products

Means foodstuffs resulting from the processing of unprocessed products. These products may contain ingredients that are necessary for their manufacture or to give them specific characteristics, irrespective of packaging or labelling operations.

Synthetic

Manufactured by chemical and industrial processes. May include products not found in nature, or simulation of products from natural sources (but not extracted from natural raw materials)

Trade

Purchase of organic products with the aim of further selling without any additional activities of processing, handling, packing, prepacking and similar activities.

Unprocessed products

Means foodstuffs that have not undergone processing, and includes products that have been divided, parted, severed, sliced, boned, minced, skinned, ground, cut, cleaned, trimmed, husked, milled, chilled, frozen, deep-frozen or thawed, irrespective of packaging or labelling operations.

1 The Principal Aims of Organic Production and Processing

Organic Production and Processing is based on a number of principles and ideas. All are important and this list does not seek to establish any priority of importance. The principles include:

- To produce sufficient quantities of high quality food, fibre and other products.
- To work compatibly with natural cycles and living systems through the soil, plants and animals in the entire production system.
- To recognize the wider social and ecological impact of and within the organic production and processing system.
- To maintain and increase long-term fertility and biological activity of soils using locally adapted cultural, biological and mechanical methods as opposed to reliance on inputs.
- To maintain and encourage agricultural and natural biodiversity on the farm and surrounds through the use of sustainable production systems and the protection of plant and wildlife habitats.
- To maintain and conserve genetic diversity through attention to on-farm management of genetic resources.
- To promote the responsible use and conservation of water and all life therein.
- To use, as far as possible, renewable resources in production and processing systems and avoid pollution and waste.
- To foster local and regional production and distribution.
- To create a harmonious balance between crop production and animal husbandry.
- To provide living conditions that allow animals to express the basic aspects of their innate behaviour
- To utilize biodegradable, recyclable and recycled packaging materials.
- To provide everyone involved in organic farming and processing with a quality of life that satisfies their basic needs, within a safe, secure and healthy working environment
- To support the establishment of an entire production, processing and distribution chain which is both socially just and ecologically responsible.
- To recognize the importance of, and protect and learn from, indigenous knowledge and traditional farming systems.

2 General requirements

2.1 General standards

2.1.1

The producer has to be registered with Organska Kontrola. A deadline for the application for registration with OK will be predetermined by OK.

The Producer/Business is considered to be registered when the complete application has been processed and a registration contract has been signed and when operator pay the application fees for the specified production

2.1.2

The producer shall comply with Organska Kontrola Standards and Organska Kontrola Certification requirements. OK certification is a voluntary and available to all who accept to comply with OK standards, Certification requirements and the agreement entered into with Organska Kontrola.

2.1.3

The production and the production area must be clearly defined. This includes maps and field register of all organic and non-organic fields.

2.1.4

Organska Kontrola has the right to get all information needed about the production and may not certify the production due to deficiency in documentation of, or information about the production.

Operator is obligated to inform OK, regarding all changing in his production unit and/or activities of production concerned.

Special/new certification decision is required in a case of:

- new holding /cow shed /greenhouse
- new land parcel
- new animal species
- new products
- new packing
- recipe changes
- packing changes (including design and decoration)
- new production unit
- new production facility
- new production line (EU)
- the certification body must be notified and certify new processes before the actual use

If a new inspection is required before the certification, the operator bears the costs.

2.1.5

Organska Kontrola may at any given time make an inspection. Fields, grounds, greenhouse, stables, storages, processing areas, warehouses and other places for production should be made accessible to Organska Kontrola.

2.1.6

The operator shall document all processing and quantities processed. The documentation shall show compliance with OK standards and the documentation shall be available for the certification body. Organska Kontrola has the authority to require documentation from the operator that it deems necessary.

The operator shall document all products purchased for OK-certified production. The documentation shall contain information on quantities, origin and content. On invoices and delivery notes it shall be stated if a product is OK certified.

Products received to the operation shall be checked and controlled so that content of the consignment has not been substituted.

The operator shall also document the quantity, content and the receiver of sold OK-certified products.

The documentation shall be stored for at least five years so it can be checked during inspection.

Production records and documentation shall be kept in the way that fully demonstrates traceability.

2.1.7

Violations of these standards, committed purposely or accidentally, by the producer or other persons, have to be reported to Organska Kontrola.

2.1.8

Violations of the standards may result in disapproval of a product, a production process or a producer.

2.1.9

The producer shall act in accordance with the national legislation.

2.1.10

OK certified products may be transported by carriers without a special contract. The supplier must ensure that the products, delivery notes and invoices are marked and labeled so that substitution cannot occur. Upon delivery, the purchaser shall ensure the products are properly labeled and packaged on delivery so that no substitution or mixing of products can occur.

OK certified products shall be transported and handled so that separate handling is ensured and no contamination is possible. Products may not be contaminated by containers, packaging or other factors in the surroundings.

2.1.11

The entire agricultural holding shall be managed in compliance with the requirements applicable to organic production.

2.1.12

A holding may be split up into clearly separated units which are not all managed under organic production. As regards animals, different species shall be involved. As regards plants, different varieties that can be easily differentiated shall be involved.

2.1.13

Where not all units of a holding are used for organic production, the operator shall keep the land, animals, and products used for, or produced by, the organic units separate from those used for, or produced by, the non-organic units and keep adequate records to show the separation.

2.2 Ecosystem Management

2.2.1

Operators shall take measures to maintain and improve landscape and enhance biodiversity quality.

2.2.2

Clearing of primary ecosystems for establishment of organic production is prohibited.

2.3 Soil and Water Conservation

2.3.1

All operators shall take defined and appropriate measures to prevent erosion.

2.3.2

Land preparation by burning vegetation shall be restricted to the minimum.

2.3.3

Crop production, processing and handling systems shall return nutrients, organic matter and other resources removed from the soil through harvesting by the recycling, regeneration and addition of organic materials and nutrients.

2.3.4

Operators shall not deplete nor excessively exploit water resources, and shall seek to preserve water quality. They shall where possible recycle rainwater and monitor water extraction.

2.3.5

Grazing management shall not degrade land or pollute water resources.

2.3.6

Relevant measures shell be taken to prevent or remedy soil and water salinization.

2.4 Genetic Engineering

2.4.1

The use or negligent introduction of genetically engineered organisms or their derivatives is prohibited. This includes animals, seed, microorganisms and farm inputs such as fertilizers, soil conditioners or crop protection materials.

2.4.2

For the purpose of the prohibition of the use of GMOs, operators using non-organic products purchased from third parties shall require the vendor to confirm that the products supplied have not been produced from or by GMOs.

2.4.3

The use of genetically engineered seeds, pollen, transgene plants or plant material is not allowed.

2.4.4

Organic processed products shall not use ingredients, additives or processing aids derived from GMOs.

2.4.5

Inputs, processing aids and ingredients shall be traced back one step in the biological chain to the direct source organism *(see definition) from which they are produced to verify that they are not derived from GMOs.

2.4.6

Contamination of organic product by GMOs that result from circumstances beyond the control of the operator may alter the organic status of the operation and/or product.

2.4.7

On farms with split production the use of genetically engineered organisms is not permitted on any production activity on the farm.

2.5 Conversion – general requirements

2.5.1

The start of the conversion period shall be calculated from the date of application to Organska Kontrola.

2.5.2

Conversion periods specific to the type of crop or animal production shall be defined.

2.5.3

During the conversion period all rules established by this Standard shall apply.

2.5.4

On a holding or unit partly under organic production and partly in conversion, the operator shall keep the organic and in-conversion products separate and the animals separate or readily separable and keep adequate records to show the separation.

2.6 Social Justice and responsibility

2.6.1

Operators shall have a policy on social justice. Operators who hire fewer than ten (10) persons for labour and those who operate under a state system that enforces social laws may not be required to have such a policy.

2.6.2

In cases where production is based on violation of rules of basic human rights and clear cases of social injustice, that product cannot be declared as organic.

2.6.3

Employees and contractors of organic operations have the freedom to associate, the right to organize and the right to bargain collectively. Operators shall provide their employees and contractors equal opportunity and treatment, and shall not act in a discriminatory way.

2.6.4

Operators shall not use forced or involuntary labour.

2.6.5

Operators shall provide their employees and contractors equal opportunity and treatment, and shall not act in a discriminatory way.

2.6.6

Operators shall not hire child labour.

Children are allowed to experience work on their family's farm or a neighbouring farm provided that:

- Such work is not dangerous or hazardous to their health and safety;
- it does not jeopardize the children's educational, moral, social, and physical development;
- Children are supervised by adults or have authorization from a legal guardian.

3 Crop Production

3.1 Conversion

3.1.1

Plant products from annual production, pastures and meadows shall only be considered organic after a conversion period of 2 years. For annual crops 2 years shall elapse before sowing of the certified production. For perennials (excluding pastures and meadows) a period of at least 3 years prior to harvest is required.

3.1.2 Standard for production intended to be sold in BH and other markets outside the EU

Plant production can be certified after a 1 year conversion period for annual and after 18 months for perennial.

3.1.3

The Organska kontrola may decide to recognise retroactively as being part of the conversion period any previous period in which:

- a. the land parcels were registered in an official environmental protection or similar programme, provided that the measures concerned ensure that products not authorised for organic production have not been used on those parcels, or
- b. the parcels were natural or agricultural areas which were not treated with products not authorised for organic production.

The conversion period can be taken into consideration retroactively only where satisfactory proof has been furnished to the Organska kontrola allowing it to satisfy itself that the conditions were met for a period of at least three years.

At any case the operation shall be monitored during a minimum of 6 months before certification is possible.

Organska Kontrola determines the necessary documentation and fee for retroactive conversion.

3.1.4

Organska Kontrola may decide, in certain cases, for land which has been exposed to intensive use of products not authorised for organic production to extend the conversion period beyond the period referred to in section 3.1.1.

3.1.5

In the case of parcels which have already been converted to or were in the process of conversion to organic farming, and which are treated with a product not authorised for organic production, the Organska Kontrola may shorten the conversion period referred to in section 3.1.1. in the following two cases:

a. parcels treated with a product not authorised for organic production as part of a compulsory disease or pest control measure imposed by the state or local programme.

b. parcels treated with a product not authorised for organic production as part of scientific tests approved by the competent authority of the state or local programme.

The length of the conversion period shall be fixed taking into account of the following factors:

- a. the process of degradation of the product concerned shall guarantee, at the end of the conversion period, an insignificant level of residues in the soil and, in the case of a perennial crop, in the plant;
- b. the harvest following the treatment may not be sold with reference to organic production methods.

3.1.6

If the whole farm is not converted the organic and in conversion parts of the farm shall be clearly and continuously separate.

3.1.7

Farmland shall not be switched between organic and conventional management.

3.2 Parallel production

3.2.1

A crop which is intended to be sold as OK certified shall not be cultivated both organic and non-organic on the same holding, unless the varieties differ in such a way that they can easily distinguished.

3.2.2 Standard for production intended to be sold in BH and other markets outside the EU

Organska Kontrola can make exceptions to this if the organic and non-organic crops are harvested at different times and this can be verified through inspection. Organska Kontrola has the right to issue instructions to the operator to make sure that organic and non-organic products are not mixed.

3.3 Choice of Crops and Varieties

3.3.1

For the production of products other than seed and vegetative propagating material only organically produced seed and propagating material shall be used.

Seed and plant materials shall be propagated under organic management for at least one generation in the case of annuals, and for perennials two growing season before being certified as organic seed and plant material.

3.3.2

When organic seed and plant materials are not available on the market seed and vegetative propagating material from a production unit in conversion to organic farming may be used. Where this is not applicable, Organska Kontrola may authorise the use of

non-organic seed or vegetative propagating material provided that they have not been treated with plant protection products not permitted by these standards, unless chemical treatment is prescribed in accordance with national requirements for phytosanitary purposes for all varieties of a given species in the area where the seed or seed potatoes are to be used. The authorisation for use shall be granted before sowing of the crop and is done annually. The amounts used of conventional seeds shall be reported to Organska Kontrola.

Organska Kontrola will provide a list of organic and conventional untreated seeds and plant materials available.

3.3.3 Standard for production intended to be sold in BH and other markets outside the EU

Organska Kontrola can also on a case by case basis allow the use of chemically treated seeds and plant material when the operator can show that there is no untreated seeds or planting materials available.

3.4 Diversity in Crop Production

3.4.1

Diversity in plant production and activity shall be assured by a suitable crop rotation and/or variety of plantings. Pasture or green manure is recommended to be included in the crop rotation unless the operator can demonstrate diversity in plant production by other means.

3.4.2

For perennial crops diversity shall be ensured through orchard/plantation floor cover and/or diversity or planting shelterbelts.

3.5 Soil Fertility and Fertilization

3.5.1

Organic plant production shall use tillage and cultivation practices that maintain or increase soil organic matter, enhance soil stability and soil biodiversity, and prevent soil compaction and soil erosion.

3.5.2

The fertility and biological activity of the soil shall be maintained and increased by multiannual crop rotation including legumes and other green manure crops, and by the application of livestock manure or organic material, both preferably composted, from organic production.

3.5.3

For compost activation appropriate plant-based preparations or preparations of microorganisms may be used.

Appropriate preparations of micro-organisms and biodynamic preparation may be used to improve the overall condition of the soil or the availability of nutrients in the soil or in the crops.

3.5.4

Material of microbial, plant or animal origin shall form the basis of the fertility program.

3.5.5

Nutrients and fertility products shall be stored and applied in a way that protects soil, water, and biodiversity. Restrictions may be based on amounts, location, timing, treatments, methods, or choice of inputs applied.

3.5.6

The amount of animal manure used shall not exceed 170 kg of nitrogen per hectare and year of agricultural area used. This limit shall only apply to the use of farmyard manure, dried farmyard manure and dehydrated poultry manure, composted animal excrements, including poultry manure, composted farmyard manure and liquid animal excrements.

Organic-production holdings may establish written cooperation agreements exclusively with other holdings which comply with the organic production rules, with the intention of spreading surplus manure from organic production. The maximum limit shall be calculated on the basis of all of the organic production units involved in such cooperation.

3.5.7

Where the nutritional needs of plants cannot be met by cultivation practices, crop rotation and the application of organic material only material referred to in Appendix 1 of this Standard may be used and only to the extent necessary. Operators shall keep documentary evidence of the need to use the product.

3.5.8

All plant production techniques used shall prevent or minimise any contribution to the contamination of the environment.

3.5.9

Mineral nitrogen fertilisers shall not be used.

3.5.10

Hydroponic production is not allowed.

3.6 Pest, Disease, Weed, and Growth Management

3.6.1

All organic production systems shall display a set of positive processes/mechanisms capable of accounting for management of significant pests, weeds and diseases under normal circumstances. The prevention of damage caused by pests, diseases and weeds shall rely primarily on the protection by natural enemies, the choice of species and varieties, crop rotation, cultivation techniques and thermal processes.

In the case of an established threat to a crop, plant protection products may only be used if they have been authorised for use in organic production under Appendix 9.

3.6.2

Physical methods for pest, disease and weed management are permitted, including the application of heat. Thermal sterilization of soils to combat pests and diseases is can be allowed after permission of Organska Kontrola.

3.6.3

Where plants cannot be adequately protected from pests and diseases by preventive measures only products referred to in Appendix 2 of this Standard may be used in organic production. Operators shall keep documentary evidence of the need to use the product.

3.6.4

Pest, disease and weed management products that are prepared at the farm from local plants, animals and micro-organisms are permitted.

3.6.5

Substances used in traps and dispensers shall be prevented from contaminate crops or the environment. Traps shall be collected after use and disposed safely.

3.7 Avoiding Contamination

3.7.1

The operator shall employ measures including barriers and buffer zones to avoid potential contamination and limit contaminants in organic products.

3.7.2

In case of a reasonable suspicion of contamination Organska Kontrola shall ensure that an analysis of the relevant products and possible sources of pollution (soil, water, air and inputs) is undertaken to determine the level of contamination and shall make the appropriate responses, such as detection of contamination sources, considering background contamination and other relevant factors.

3.7.3

For synthetic structure coverings, mulches, fleeces, insect netting and silage wrapping, only products based on polyethylene and polypropylene or other polycarbonates are

permitted. These shall be removed from the soil after use and shall not be burned on the farmland.

3.7.4

All equipment from conventional farming systems shall be thoroughly cleaned of potentially contaminating materials before being used on organically managed areas.

3.7.6

Products for cleaning and disinfection in plant production shall be used only if they have been authorised for use in organic production under Appendix 9.

Products for cleaning and disinfection in plant production are allowed if legally accepted under national law.

3.8 Storage of inputs

3.8.1

In case of organic plant and livestock production units, storage of input products other than those authorised under this Standard is prohibited in the production unit.

4 Mushroom Production

For production of mushrooms, substrates may be used, if they are composed only of the following components:

- 1. farmyard manure and animal excrements:
 - a. either from holdings producing according to the organic production method;
 - b. or referred to in Annex I, only when the product referred to in point (a) is not available; and when they do not exceed 25 % of the weight of total components of the substrate, excluding the covering material and any added water, before composting;
- 2. products of agricultural origin, other than those referred to in point 1, from holdings producing according to organic production method;
- 3. peat not chemically treated;
- 4. wood, not treated with chemical products after felling;
- 5. mineral products referred to in Appendix 1, water and soil.

5 Animal Husbandry standards

5.1 Animal Management - general

5.1.1

Landless livestock production, by which the operator of the livestock does not manage agricultural land and/or has not established a written cooperation agreement with another operator, is prohibited.

5.2 Conversion and breeding

5.2.1

On a holding or unit partly under organic production and partly in conversion, the operator shall keep the organically produced and in-conversion products separate and the animals separate or readily separable and keep adequate records to show the separation.

5.2.2

Animals and animal products produced during the conversion period shall not be marketed with the indications to organic production used in the labelling and advertising of products.

5.2.3

Where non-organic livestock has been brought onto a holding and if livestock products are to be sold as organic products, conversion period must have been applied of at least:

- a. 12 months in the case of equidae and bovines, including bubalus and bison species, for meat production, and in any case at least three quarters of their lifetime;
- b. 6 months in the case of small ruminants and pigs and animals for milk production;
- c. 10 weeks for poultry for meat production, brought in before they are three days old;
- d. six weeks in the case of poultry for egg production.

5.2.4 Standard for products intended to be sold in BH market

Animals present on the farm when converting to organic production shall undergo a one time conversion period according to the following:

- a. meat: 12 months
- b. dairy: 3 months
- c. eggs: 6 weeks

5.2.5

The conversion rules (section 3.1.1 of this Standard) shall apply to the whole area of the production unit on which animal feed is produced.

Conversion period may be reduced to one year for pasturages and open air areas used by non-herbivore species. This period may be reduced to six months where the land concerned has not during the last year received treatments with products not authorised for organic production.

5.2.6

Where non-organic animals exist on a holding at the beginning of the conversion period their products may be deemed organic if there is simultaneous conversion of the complete production unit, including livestock, pasturage and/or any land used for animal feed. The total combined conversion period for both existing animals and their offspring, pasturage and/or any land used for animal feed, may be reduced to 24 months, if the animals are mainly fed with products from the production unit.

5.2.7

Organic livestock and breeding stock shall be used whenever possible. Organic livestock shall be born and raised on organic holdings. When buying in animals to the farm organic animals shall always be preferred but if organic animals are not available in sufficient number non-organic animals may be brought onto a holding for breeding purpose under specific condition provided in this Standard. Such animals and their products may be deemed organic after compliance with the conversion period referred to in section 5.2.3 of this Standard.

5.2.8

Non-organic young mammals, when a herd or flock is constituted for the first time, shall be reared in accordance with the organic production rules immediately after they are weaned. Moreover, the following restrictions shall apply at the date on which the animals enter the herd:

- a. buffalo, calves and foals shall be less than six months old;
- b. lambs and kids shall be less than 60 days old;
- c. piglets shall weigh less than 35 kg.

5.2.9

Non-organic adult male and nulliparous female mammals, for the renewal of a herd or flock, shall be reared subsequently in accordance with the organic production rules. Moreover, the number of female mammals is subject to the following restrictions per year:

- a. up to a maximum of 10% of adult equine or bovine, including bubalus and bison species, livestock and 20% of the adult porcine, ovine and caprine livestock, as female animals;
- b. for units with less than 10 equine or bovine animals, or with less than five porcine, ovine or caprine animals any renewal as mentioned above shall be limited to a maximum of one animal per year.

5.2.10

The percentages referred to in section 5.2.9 of this Standard may be increased up to 40%, subject to prior authorisation by the Organska Kontrola, in the following special cases:

- a. when a major extension to the farm is undertaken;
- b. when a breed is changed;

- c. when a new livestock specialisation is initiated;
- d. when breeds are in danger of being lost to farming and in the case animals of those breeds must not necessarily be nulliparous.

5.2.11

Organska Kontrola may authorise on temporary basis, in the case of high mortality of animals caused by health or catastrophic circumstances, a renewal or reconstitution of the herds or flock with non-organic animals, when organically reared animals are not available and provided that the respective conversion period are applied to the nonorganic animals.

5.2.12

Where organic animals are not available, and with prior authorisation of the Organska Kontrola, when a flock is constituted for the first time, renewed or reconstituted and organically reared poultry are not available in sufficient numbers, non-organically reared poultry may be brought into an organic poultry production unit, provided that the pullets for the production of eggs and poultry for meat production are less than three days old.

5.2.13

Non-organically reared pullets for egg production up to age of 18 weeks may be brought into an organic livestock unit until 31 December 2021, when organically reared pullets are not available and provided that the relevant provisions related to feeding and disease prevention and treatment are complied with this Standard.

5.2.14

Operators shall keep documentary evidence of the use of provisions referred to in section 5.2.8 to 5.2.13 of this Standard.

5.2.15

Where livestock is obtained from non-organic units, special measures such as screening tests or quarantine periods may apply, depending on local circumstances.

5.2.16

Breeding systems shall be based on breeds that can reproduce successfully under natural conditions. Breeds shall be selected to avoid specific diseases or health problems associated with some breeds or strains used in intensive production. Preference should be given to indigenous breeds and strains. The choice of breeds shall also contribute to the prevention of any suffering and to avoiding the need for the mutilation of animals.

5.2.17

Artificial insemination is permitted.

5.2.18

Embryo transfer techniques and cloning are prohibited.

5.2.19

Hormones are prohibited to induce ovulation and birth unless applied to individual animals for medical reasons and under veterinary supervision.

5.3 Housing and outdoor requirements

5.3.1

The housing of animals shall offer a suitable stable climate corresponding to the animal species. Insulation, heating and ventilation of the building shall ensure that air circulation, dust level, temperature, relative air humidity, and gas concentration are kept within limits which are not harmful to the animals. The building shall permit plentiful natural ventilation and light to enter.

5.3.2

The livestock shall have permanent access to open air areas, preferably pasture, whenever weather conditions and the state of the ground allow this unless restrictions and obligations related to the protection of human and animal health are imposed on the basis of relevant national legislation.

5.3.3

The stocking density in buildings shall provide for the comfort, the well-being and the species-specific needs of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioral needs of the animals, which depend in particular on the size of the group and the animals' sex. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom them, assume all natural postures and make all natural movements such as stretching and wing flapping.

5.3.4

Personnel keeping animals shall possess the necessary basic knowledge and skills as regards the health and the welfare needs of the animals.

5.3.5

Husbandry practices, including stocking densities and housing conditions shall ensure that the developmental, physiological and ethological needs of animals are met.

5.3.6

The total stocking density shall be such as not to exceed the limit of 170 kg of nitrogen per year/hectare of agricultural area. To determine the appropriate density of livestock the Organska Kontrola shall set out the livestock units equivalent to the above limit. The figures laid down in Appendix 5 of this Standard may be taken as a guideline.

5.3.7

The minimum surfaces for indoor and outdoor areas, and other characteristics of housing for different species and categories of animals, are laid down in Appendix 4 of this Standard.

5.3.8

The number of livestock shall be limited with a view to minimising overgrazing, poaching of soil, erosion, or pollution caused by animals or by the spreading of their manure.

5.3.9.

Duration of transport of livestock shall be minimized.

5.3.10

Loading and unloading of animals shall be carried out without the use of any type of electrical stimulation to coerce the animals. The use of allopathic tranquillizers, prior to or during transport, is prohibited.

5.3.11

Livestock housing shall have smooth, but not slippery floors. At least half of the indoor surface area shall be solid, that is, not of slatted or of grid construction.

5.3.12

The housing shall be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material shall be provided in the rest area. The litter shall comprise straw or other suitable natural material that may be improved and enriched with any mineral product listed in Appendix 1 of this Standard.

5.3.13

Herbivores shall have access to pasturage for grazing whenever conditions allow. Notwithstanding, bulls over one year old shall have access to pasturage or an open air area.

5.3.14

Poultry shall have access to an open air area for at least one third of their life.

5.3.15

Open air areas may be partially covered.

5.3.16

In cases where herbivores have access to pasturage during the grazing period and where the winter-housing system gives freedom of movement to the animals, the obligation to provide open air areas during the winter months may be waived.

5.3.17

Open air areas for poultry shall be mainly covered with vegetation and be provided with protective facilities and permit fowl to have easy access to adequate numbers of drinking and feeding troughs.

5.3.18

Keeping adult bovines for meat production indoors is allowed only during the end of the fattening period to a maximum of 1/5 of the life time, but in any case no longer than 3 months.

5.3.19

The housing of calves in individual boxes shall be forbidden after the age of one week.

5.3.20

Pigs shall be kept in groups. Sows in late stage of the pregnancy period and the suckling period of piglets are exempted.

5.3.21

Piglets shall not be kept on flat decks or in piglet cages.

5.3.22

Exercise areas shall permit dunging and rooting by porcine animals. For the purposes of rooting, different substrates can be used.

5.3.23

Tethering or isolation of livestock shall be prohibited, unless for individual animals for a limited period of time, and in so far as this is justified for safety, welfare or veterinary reasons.

5.3.24

Where the operator holding faces climatic, geographical or structural constraints, Organska Kontrola may authorise cattle in small holdings to be tethered if it is not possible to keep the cattle in groups appropriate to their behaviour requirements, provided they have access to pastures during the grazing period and at least twice a week access to open air areas when grazing is not possible.

5.4 Specific housing conditions and husbandry practices for poultry

5.4.1

Poultry shall not be kept in cages.

5.4.2

Buildings for all poultry shall meet the following conditions:

- a. at least one third of the floor area shall be solid, that is, not of slatted or of grid construction, and covered with a litter material such as straw, wood shavings, sand or turf;
- b. in poultry houses for laying hens, a sufficiently large part of the floor area available to the hens shall be available for the collection of bird droppings;
- c. they shall have perches of a size and number commensurate with the size of the group and of the birds as laid down in Appendix 4 of this Standard;

d. they shall have exit/entry pop-holes of a size adequate for the birds, and these pop-holes shall have a combined length of at least 4 m per 100 m2 area of the house available to the birds.

5.4.3

Each poultry house shall not contain more than:

- 4800 chickens,
- 3000 laying hens,
- 5200 guinea fowl,
- 4000 female Muscovy or Peking ducks or 3200 male Muscovy or Peking ducks or other ducks,
- 2500 capons, geese or turkeys.

5.4.4

The total usable area of poultry houses for meat production on any single unit, shall not exceed 1600 m2.

5.4.5

Poultry houses shall be constructed in a manner allowing all birds easy access to open air area.

5.4.6

Natural light may be supplemented by artificial means to provide a maximum of 16 hours light per day with a continuous nocturnal rest period without artificial light of at least eight hours.

5.4.7

To prevent the use of intensive rearing methods, poultry shall either be reared until they reach a minimum age or else shall come from slow-growing poultry strains. Where slow-growing poultry strains are not used by the operator the following minimum age at slaughter shall be:

- 81 days for chickens,
- 150 days for capons,
- 49 days for Peking ducks,
- 70 days for female Muscovy ducks,
- 84 days for male Muscovy ducks,
- 92 days for Mallard ducks,
- 94 days for guinea fowl,
- 140 days for male turkeys and roasting geese, and
- 100 days for female turkeys.

5.4.8

Water fowl shall have access to stream, pond or lake or pool whenever the weather and hygienic conditions permit in order to respect their species-specific needs and animal welfare requirements.

5.4.9

Buildings shall be emptied of livestock between each batch of poultry reared and properly cleaned disinfected.

In addition, when the rearing of each batch of poultry has been completed, runs shall be left empty to allow vegetation to grow back. Organska Kontrola shall establish the period for which runs must be empty. The operator shall keep documentary evidence of the application of this period. These requirements shall not apply where poultry is not reared in batches, is not kept in runs, and is free to roam, throughout the day.

5.5 Split Production

5.5.1

If the whole farm is not converted the organic and conventional parts of the farm shall be clearly and continuously separated.

5.5.2

Non organic livestock may be present on the holding provided they are reared on units where the buildings and parcels are separated clearly from the units producing in accordance with the organic production rules and a different species is involved.

5.5.3

Non-organic livestock may use organic pasturage for a limited period of time each year, provided that such animals come from farming systems that target the sustainable use of land (e.g. farms in disadvantaged areas, environmental schemes, higher animal welfare) and that organic animals are not present at the same time on that pasture.

5.5.4

Organic animals may be grazed on common land under certain restrictive conditions, providing that:

- a. the land has not been treated with products not authorized for organic production for at least three years;
- b. any non-organic animals which use the land concerned are derived from farming systems that target the sustainable use of land (e.g. farms in disadvantaged areas, environmental schemes, higher animal welfare);
- c. any livestock products from organic animals, whilst using this land, shall not be regarded as being from organic production, unless adequate segregation from non-organic animals can be proved.

5.5.5

Operators shall keep documentary evidence of the use of provisions referred to in section 5.5.3 and 5.5.4 of this Standard.

5.6 Animal Nutrition

5.6.1

Animals shall be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development.

5.6.2

The use of a limited proportion of non-organic protein feed is allowed for porcine and poultry species where farmers are unable to obtain feed exclusively from organic production. The maximum percentage of non-organic protein feed authorised per period of 12 months for those species shall be 5% for the calendar years 2018, 2019, 2020 and 2021. The calculations shall be done on the feed of agricultural origin and as a percentage of dry matter on an annual basis.

The operator shall keep documentary evidence of the need for the use of this provision.

5.6.3 Standard for products intended to be sold in BH market

The maximum percentage of non-organic feed is 15% dry matter for ruminant and 25% dry matter for non-ruminant calculated on a daily basis.

5.6.4

A part of the ration may contain feed from holdings which are in conversion to organic farming:

- a. In conversion feedingstuffs may be used up to a maximum of 30% in the ration, in relation to the annual average per animal category. If the in-conversion feedingstuffs come from a farm itself this percentage may be increased to 60 %.
- b. Up to 20 % of the total average amount of the feed the livestock may originate from the grazing or harvesting of permanent pastures or perennial forage parcels protein crops in the first year of conversion, provided that they are part of the farm itself and have not been part of an organic production unit of that farm in the last five years.

The percentage fixed in this section shall be calculated annually as a percentage of the dry matter of feedingstuffs of plant origin. When both in-conversion feedingstuffs and feedingstuffs from parcels in their first year of conversion are being used, the total combined percentage of such feedingstuffs shall not exceed the maximum percentages fixed in this section.

5.6.5

In case of herbivores, except during the period of transhumance, at least 60 % of the feed shall come from the farm itself and 20% of the feed in case of pigs and poultry. In case that is not feasible, the feed should be produced in cooperation with other organic farms in the region.

5.6.6. Standard for products intended to be sold in BH market

The prevailing part (at least more than 50%) of the feed shall come from the farm unit itself or be produced in cooperation with other farms in the region

5.6.7

Rearing systems for herbivores are to be based on maximum use of grazing pasturage according to the availability of pastures in the different periods of the year.

5.6.8

Herbivores shall have at least 60% of the dry matter in their daily feed from roughage, fresh or dried fodder, or silage. For animals in dairy production in the first three months of lactation reduction to 50% is allowed.

For pigs and poultry roughage, fresh or dried fodder, or silage shall be added to the daily ration.

5.6.9 Standard for products intended to be sold in BH market

Ruminants shall have daily access to roughage.

5.6.10

When the animals are being driven from one pasture to the other during a period of transhumance, the uptake of conventional vegetation will be acceptable (max. up to 10 % of annual ration referred to the dry matter contents of the fodder of agricultural origin).

5.6.11

Young stock from mammals shall be provided maternal milk in preference to natural milk and shall be weaned after the minimum time that takes into account the natural behaviour of the relevant animal species:

- three months for bovines (including bubalus, bison and equidae species),
- 45 days for sheep and goats and
- 40 days for pigs.

5.6.12

With the exception of bees, livestock shall have permanent access to pasture or roughage.

5.6.13

Growth promoters and synthetic amino-acids shall not be used.

5.6.14

The keeping of livestock in conditions, or on a diet, which may encourage anaemia, is prohibited.

5.6.15

Fattening practices shall be reversible at any stage of the rearing process. Force-feeding is forbidden.

5.6.16

Organska Kontrola can allow on temporary basis the use of non-organic feedingstuff for a limited period and in relation to a specific area by individual operators when forage production is lost or when restrictions are imposed, in particular as a result of exceptional meteorological conditions, outbreak of diseases, and contamination with toxic substances or fire. Operator shall keep documentary evidence of the use of this provision.

5.6.17

Non organic feed materials from plant origin, feed materials from animal and mineral origin, feed additives, certain products used in animal nutrition and processing aids shall be used only if they have been authorised for use in organic production under this Standard and if they listed in Appendix 6 and the restrictions laid down therein are complied with.

5.6.18

Organic feed materials of animal origin, feed materials of mineral origin and products and by-products from sustainable fisheries may be used in organic production only if they are listed in Appendix 6 of this Standard and the restrictions laid down therein are complied with.

5.6.19

Feed additives, certain products used in animal nutrition, and processing aids may be used in organic production only if they are listed in Appendix 7 and the restrictions laid down therein are complied with.

5.6.20

Non organic spices, herbs and molasses may be used in organic production provided that their organic form is not available and their use is limited to 1% of the feed ration of a given species, calculated annually as a percentage of the dry matter of feed from agricultural origin.

5.6.21

Any feed materials used or processed in organic production shall not have been processed with the aid of chemically synthesised solvents.

5.7 Disease prevention and veterinary treatment

5.7.1

Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density, and adequate and appropriate housing maintained in hygienic conditions.

5.7.2

If an animal becomes sick or injured the animal shall be treated promptly and adequately. If animals have to be treated, phytotherapeutic treatments, homeopathic products, trace elements and products listed in Appendix 6 (part 1) and Appendix 7 (part 3) shall be

given priority. When these methods are inappropriate chemically synthesised allopathic veterinary medicinal products including antibiotics may be used under strict conditions and under responsibility of veterinarian. Restrictions with respect to courses of treatment and withdrawal periods shall be defined.

Producers shall not withhold medication where it will result in unnecessary suffering of the livestock.

5.7.3

The use of immunological veterinary medicines is allowed.

5.7.4

Treatments related to the protection of human and animal health imposed on the basis of national legislation shall be allowed.

5.7.5

The use of substances to promote growth or production (including antibiotics, coccidiostats and other artificial aids for growth promotion purposes) and the use of hormones or similar substances to control reproduction or for other purposes (e.g. induction or synchronisation of oestrus), is prohibited.

5.7.6

Whenever veterinary medicinal products are used, these information is to be declared to the Organska Kontrola before the livestock or livestock products are marketed as organically produced: date of treatment, details of the diagnosis, the posology; type of treatment product, the indication of the active pharmacological substances involved method of treatment and veterinary prescription for veterinary care with reasons and withdrawal periods.

Livestock treated shall be clearly identified: individually in the case of large animals; individually, or by batch, or by hive, in the case of poultry, small animals and bees.

5.7.7

The withdrawal period for allopathic veterinary treatments and parasite treatments including treatments under compulsory control and eradication schemes shall be twice the legal withdrawal period or in a case in which this period in not specified 48 hours.

5.7.8

With the exception of vaccinations, treatments for parasites and compulsory eradication schemes where an animal or group of animals receive more than three courses of treatments with chemically-synthesized allopathic veterinary medicinal products or antibiotics within 12 months, or more than one course of treatment if their productive life cycle is less than one year, the livestock concerned, or produce derived from them, may not be sold as organic products, and the livestock shall undergo the conversion periods.

5.7.9.

Only medication which is approved or prescribed by veterinarian may be stored in the operation. The medication is to be stored in a medicine cupboard safeguarded against access by unauthorised persons. A clear labelling of the medication has to be provided. Residual amounts of medication shall be disposed appropriately.

5.8 Mutilations

5.8.1

Any suffering, including mutilation, shall be kept to a minimum during the entire life of the animal, including at the time of slaughter.

5.8.2

Operations such as attaching elastic bands to the tails of sheep, tail-docking, cutting of teeth, trimming of beaks, and dehorning shall not be carried out routinely in organic farming. However, some of these operations may be authorised by the Organska Kontrola for reasons of safety or if they are intended to improve the health, welfare or hygiene of the livestock on a case-by-case basis.

Any suffering to the animals shall be reduced to a minimum by applying adequate anaesthesia and/or analgesia and by carrying out the operation only at the most appropriate age by qualified personnel.

5.8.3

Physical castration is allowed in order to maintain the quality of products and traditional production practices but only under the conditions set out in the section 5.8.2 of this Standard.

5.9 Cleaning and disinfection

5.9.1

Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimize smell and to avoid attracting insects or rodents.

5.9.2

With regard to cleaning and disinfection, products for cleaning and disinfection in livestock buildings, installations and utensils, shall be used only if they have been authorised for use in organic production under Appendix 8 of this Standard.

5.9.3

Rodenticides (to be used only in traps), and the products listed in Appendix 2 of this Standard, can be used for the elimination of insects and other pests in buildings and other installations where livestock is kept.

6 Wild harvested products

6.1.1

Wild harvested products include products that is harvested or gathered without, to any considerable extent, being actively cultivated. This includes plant products and mushrooms, as well as insects, molluscs and animals that are stationary or do not move beyond the boundaries of the defined area.

6.1.2

Wild harvested products shall derive from a stable and sustainable growing environment. Harvesting shall not exceed the sustainable yield of the ecosystem, or threaten the existence of plant, fungal or animal species, including those not directly exploited.

It is forbidden collection of species that are listed on national red list or list of endangered species. It is forbidden collection of species included in international protection program or their collection is limited in any other way.

(<u>www.iucnredlist.org;</u> www.cites.org).

6.1.3

Operators shall harvest products from clearly defined areas where prohibited substances have not been applied for the last 3 years before collection.

6.1.4

The collection or harvest area shall be at an appropriate distance from sources of pollution and contamination (adequate buffer zones). Areas shall be situated such that contamination does not reduce the value of the products as food or feed.

6.1.5

All places of purchase shall have personnel who have good knowledge about these standards. At collection points information such as clear maps of collection areas, instruction for collectors and OK standards shall be available to collectors. Illiterate collectors will be informed orally. All collectors shall confirm commitment to comply with OK standards by signing contract/declaration for collectors.

7 Beekeeping

7.1

Beekeeping can be certified first when it has complied with OK's standards and been inspected by the certification body for one conversion year.

7.2

Beehives shall primarily consist of natural materials. Materials with toxic effects to the bees or to the environment shall not be used.

7.3

Wax should be replaced by organically produced wax during the conversion period. In cases where all the wax cannot be replaced during a one-year period, the conversion period may be extended by Organska Kontrola.

7.4

In the case of new installations or during the conversion period, non-organic beeswax may be used only:

- a) where beeswax from organic beekeeping is not available on the market;
- b) where it is proven free of contamination by substances not authorised for organic production; and
- c) provided that it comes from the cap.

7.5

Introduced bees shall come from organic production units when possible.

When choosing breeds, consideration shall be taken to the ability of the breeds to adapt to the local conditions and their viability and resistance to disease. First choice is the European breeds of Apis mellifera and local ecotypes of these may be used.

If organic bees are not available 10% per year may be replaced by non-organic bees in case of renovation of apiaries.

7.6

In case of high mortality of bees caused by health or catastrophic circumstances Organska Kontrola may authorise on a temporary basis reconstitution of the apiaries with non-organic when organic bees are not available.

For the renovation of apiaries, 10% per year of the queen bees and swarms may be replaced by non-organic queen bees and swarms in the organic production unit provided that the queen bees and swarms are placed in hives with combs or comb foundations coming from organic production units.

7.7

Hives shall be situated in organically managed fields and/or wild natural uncontaminated areas. Hives shall be placed in an area within a radius of 3 km that ensures access to sufficient sources of honeydew, nectar and pollen that meets organic crop production requirements and/or spontaneous vegetation and/or crops treated with low environmental impact methods which cannot affect the qualification of beekeeping production as being

organic. The above mentioned requirements do not apply where flowering is not taking place, or the hives are dormant.

Apiaries shall be kept at sufficient distance from sources that may lead to the contamination of beekeeping products or to the poor health of the bees.

If hives are moved this has to be reported to Organska Kontrola within 4 weeks.

7.8

Organska Kontrola may designate regions or areas where beekeeping complying with organic production rules is not practicable.

7.9

Where an operator holding faces climatic, geographical or structural constraints, and, for the purpose of pollination actions an operator may run organic and non-organic beekeeping units on the same holding, provided that all the requirements of the organic production rules are fulfilled, with the exception of the provisions for the siting of the apiaries. In that case the product cannot be sold as organic. The operator shall keep documentary evidence of the use of this provision.

7.10 Standard for products intended to be sold in BH market

Parallel production can be permitted when the units for certified and conventional beekeeping are separated and under the condition that all production and handling are conducted in a way where there is no danger of mixing certified and conventional products.

7.11

At the end of the production season, hives shall be left with reserves of honey and pollen sufficient for the colony to survive the hibernation period.

Supplementary feeding shall only be permitted where the survival of the hives is endangered due to climatic conditions and only between the last honey harvest and the start of the next nectar or honeydew flow period. Organic honey, organic sugar or organic sugar syrup shall be used.

7.12

Organska Kontrola may authorise on a temporary basis the feeding of bees with organic honey, organic sugar or organic sugar syrup in case of long lasting exceptional weather conditions or catastrophic circumstances, which hamper the nectar or honeydew production. Operator shall keep documentary evidence of the use of the above exception.

7.13 Standard for products intended to be sold in BH market

When organic honey, organic sugar or organic sugar syrup is not available conventional feed can be used for calendar year 2021.

7.14

The health and welfare of the hive shall be primarily achieved by hygiene and hive management.

Formic acid, lactic acid, acetic acid and oxalic acid as well as menthol, thymol, eucalyptol or camphor may be used in cases of infestation with Varroa destructor. Physical treatments for disinfection of apiaries such as steam or direct flame are permitted.

7.15

Where preventative measures fail, the colonies shall be treated immediately. Veterinary medicinal products may be used provided that:

- preference is given to phytotherapeutic and homeopathic treatment
- colonies can if necessary be placed in isolationif allopathic chemically synthesized medicinal products are used, the colonies shall be isolated, the bee products shall not be sold as organic, all the wax shall be replaced with wax coming from organic beekeeping and treated hives shall undergo a conversion period of one year. These requirements laid shall not apply to products allowed by this Standard.
- allopathic chemically synthesized medicinal products has to be used under the responsibility of a veterinarian.
- veterinary medicinal products may be used in organic beekeeping in so far as the corresponding use is authorised under national law.

7.16

Mutilations, such as clipping of the wings of queen bees, are prohibited.

7.17

Only natural products such as propolis, wax and plant oils can be used in the hives.

7.18

Particular care shall be taken to ensure adequate extraction, processing and storage of beekeeping products.

7.19

For the purpose of cleaning and disinfection of frames, hives and combs, sodium hydroxide may be used.

For the purposes of protecting frames, hives and combs, in particular from pests, only rodenticides (to be used only in traps), and appropriate products listed in Appendix 2, are permitted.

7.20

The use of chemical synthetic bee repellents is prohibited during honey extraction operations. The use of smoke should be kept to a minimum. Acceptable smoking materials should be natural or from materials that meet the requirements of these standards.

7.21

The destruction of bees in the combs as a method associated with beekeeping products extraction is prohibited.

7.22

The use of brood combs is prohibited for honey extraction. Destruction of male brood is permitted as a measure against Varroa.

7.23

The bees wax for new foundations shall come from organic production units.

7.24

Artificial insemination of queen bees is permitted.

8 **Processing and Preserving**

8.1 General

8.1.1

Organic products shall not be comingled with non-organic products. The preparation and later storing of processed organic food shall be continuously kept separate in time or space from non-organic food.

8.1.2

Operator shall take every measure to ensure identification of consignments and lots. All organic products shall be clearly identified as such, and stored and transported in a way that prevents contact, mixtures or exchanges with conventional product through the entire process.

8.1.3

When non-organic products are also prepared or stored in the preparation unit concerned, the operator shall inform the Organska Kontrola thereof and keep available an updated register of all operations and quantities processed.

8.1.4

The operator shall take all necessary measures to prevent organic products from being contaminated by pollutants and contaminants, including the cleaning, decontamination and disinfection of facilities and equipment. This includes preventing residual contamination of organic products after the use of cleaners, sanitizers and disinfectants.

8.1.5

When preserving, processing or storing both organic and conventional products suitable cleaning measures shall be taken beforehand. The effectiveness of the cleaning has to be checked and documented. Operator shall carry out operations on organic products only after suitable cleaning of the production equipment.

8.1.6

Organic processing shall be done with care and respect to the products. Substances and techniques shall not be used to cover lack of these or to mislead the consumer. I.e.,

substances and techniques that reconstitute properties that are lost in the processing and storage of organic food, that correct the results of negligence in the processing of these products or that otherwise may be misleading as to the true nature of these products shall not be used.

All ingredients, additives, processing aids and other substances used for processing food and any processing practice applied, such as smoking, shall respect the principles of good manufacturing practice.

8.1.7

Operators preserving products or producing processed food shall establish and update appropriate procedures based on a systematic identification of critical processing steps. The application of the this procedure shall guarantee at all times that preserved orproduced processed products comply with the organic production rules.

In particular, operators shall:

- a) take precautionary measures to avoid the risk of contamination by unauthorised substances or products;
- b) implement suitable cleaning measures, monitor their effectiveness and record these operations;
- c) guarantee that non-organic products are not placed on the market with an indication referring to the organic production method.

8.2 Ingredients

8.2.1

The product shall be produced mainly from ingredients of agricultural origin. In order to determine whether a product is produced mainly from ingredients of agricultural origin, added water and cooking salt shall not be taken into account.

8.2.2

Only additives, processing aids, flavourings, water, salt, preparations of micro-organisms and enzymes, minerals, trace elements, vitamins, as well as amino acids and other micronutrients in foodstuffs for particular nutritional uses may be fused, and only in so far as they have been authorised for use in organic production in accordance with Appendix 10.

8.2.3

All ingredients used in an organic processed product shall be organically produced except for the allowed additives and processing aids that can be found in Appendix 3, Table 1.

8.2.4

In cases where an ingredient of organic origin is unavailable in sufficient quality or quantity, Organska Kontrola can authorize use of non organic raw materials subject to annual review and re-evaluation. Operator has to notify to Organska Kontrola all the requisite evidence showing that the ingredient concerned is not produced in sufficient quantity in accordance with the organic production rules or cannot be imported from other countries.

The authorisation may be withdrawn when evidence suggests that the supply situation has improved.

8.2.5

The same ingredient shall not be used in organic and non-organic or in conversion form in a product.

Food produced from in-conversion crops shall contain only one crop ingredient of agricultural origin.

8.2.6

Only the following substances can be used in the processing of organic food, with the exception of wine:

- a. substances listed in Appendix 3 to this Standard;
- b. substances, and products labelled as natural flavouring substances or natural flavouring preparations;
- c. colours for stamping meat and eggshells;
- d. drinking water and salt (with sodium chloride or potassium chloride as basic components) generally used in food processing;
- e. minerals (trace elements included), vitamins, amino acids, and micronutrients provided that:
 - their use in food for normal consumption is "directly legally required", in the meaning of being directly required by provision of EU law or provisions of national law compatible with Union law, with the consequence that the food cannot be placed at all on the market as food for normal consumption if those minerals, vitamins, amino acids or micronutrients are not added; or
 - (ii) as regards food placed on the market as having particular characteristics or effects in relation to health or nutrition or in relation to needs of specific groups of consumers:

- in products referred to in points (a) and (b) of Article 1(1) of Regulation (EU) No 609/2013 of the European Parliament and of the Council (Regulation on food intended for infants and young children, food for special medical puroposes, and total diet replacement for weight control), their use is authorised by that Regulation and acts adopted on the basis of Article 11(1) of that Regulation for the products concerned,

- in products regulated by Commision Directive 2006/125/EC (Directive on processed cereal-based foods and baby foods for infants and young children), their use is authorised by that Directive, or

- in products regulated by Commission Directive 2006/141/EC (Directive on infant formulae and follow-on formulae), their use is authorised by that Directive.

f. preparations of micro-organisms and enzymes normally used in food processing; however, enzymes to be used as food additives have to be listed in Appendix 3, Table 1.

8.2.7

Food additives listed in Appendix 3 and marked with an asterisk in the column of the additive code number shall be calculated as ingredients of agricultural origin.

Yeast and yeast products shall be calculated as ingredients of agricultural origin as of 31 December 2013.

Preparations and substances referred to section 8.2.6 of this Standard and substances not marked with an asterisk in the column of the additive code number shall not be calculated as ingredients of agricultural origin.

8.2.8

Water and salt may be used as ingredients in the production of organic products.

8.3 Processing Methods

8.3.1

Techniques used to process organic food shall be biological, physical, and mechanical in nature. Irradiation shall not be used.

8.3.2

Extraction shall only take place with water, ethanol, plant and animal oils, vinegar, carbon dioxide or nitrogen.

8.3.3

Filtration techniques that chemically react with or modify organic food on a molecular basis shall be restricted. Filtration equipment shall not contain asbestos, or utilize techniques or substances that may negatively affect the product.

8.3.4

The following conditions and methods of storage are permitted:

- controlled atmosphere
- temperature control
- drying
- humidity regulation

8.3.5

Ethylene gas is permitted for ripening of fruits.

8.4 Pest and Disease Control

8.4.1

To manage pests the following methods shall be used:

- a. preventative methods such as disruption, elimination of habitat and access to facilities
- b. mechanical, physical and biological methods
- c. substances according to the Appendices of theses standards
- d. substances (other than pesticides) used in traps

8.4.2

When the above methods have been proved not successful conventional pest and disease control can be used. The use shall not contaminate the organic product. Organic products shall be moved out of the treated area and the operator shall take necessary precautions to prevent contamination and include measures to decontaminate the equipment or facilities. Direct use or application of a prohibited method or material to organic products renders that the product is no longer organic.

8.4.3

Prohibited substances and methods for pest and disease control:

- fumigation with ethylene oxide, methyl bromide, aluminium phosphide
- ionizing radiation (irradiation)

8.4.4

Water may be used after harvest as cleaner or disinfectant in direct contact with organic products. If need arise for other cleaners or disinfectants the products on Appendix 3, Table 2 can be used. Other substances can be used if legally required.

8.5 Packaging

8.5.1

Packaging material shall not contaminate organic food. Packaging materials, and storage containers, or bins that contain a synthetic fungicide, preservative, or fumigant are prohibited.

8.5.2

Organic produce shall not be packaged in reused bags or containers that have been in contact with any substance likely to compromise the organic integrity of the product.

8.5.3

Operators shall ensure that organic products are transported to other units, including wholesalers and retailers, only in appropriate packaging, containers or vehicles closed in such a manner that substitution of the content cannot be achieved without manipulation or damage of the seal.

Products shall be provided with label stating, without prejudice to any other indications required by law:

- the name and address of the operator, and, where different, of the owner or seller of the product;
- the name of the product accompanied by a reference to the organic production method;
- the Organska Kontrola name and/or the code number of the Organska Kontrola;
- where relevant, the lot identification mark.

The label information may also be presented on an accompanying document, if such a document can be undeniably linked with the transported packaging, container of the product. This document shall include information on the supplier and/or the transporter.

8.5.4

The closing of packaging, containers or vehicles shall not be required where:

- transportation is direct between an operator and another operator who are both subject to the organic control system, and
- the products are accompanied by a label (as described in section 8.5.3)
- both the expediting and the receiving operators shall keep documentary records of such transport operations available for the control body of such transport operations.

9 Labelling

9.1

The person or company legally responsible for the production or processing of the product and the certification body shall be identifiable.

9.2

OK logo and/or terms referring to the organic production (their derivatives or diminutives, such as "bio", "eco", alone or combined) may be used in the labelling, presentation and advertising of products which satisfy the requirements set out under this Standard.

From July 2010 the EU organic production logo may be used in the labelling, presentation and advertising of products which satisfy the requirements set out under this Standard. EU logo shall not be used in the case of in-conversion products.

In order to be labeled with EU logo and/or OK mark (referring to the organic production method) and advertised as "OK certified" the product and its ingredients must be produced in accordance with these Standards.

9.3

The terms referred to in section 9.2 shall not be used for the labelling, advertising and commercial documents of a product which does not satisfy the requirements set out under this Standard, unless they are not applied to agricultural products in food or feed or clearly have no connection with organic production.

Furthermore, any terms, including terms used in trademarks, or practices used in labelling or advertising liable to mislead the consumer or user by suggesting that a product or its ingredients satisfy the requirements set out under this Standard shall not be used.

9.4

Labelling as referred to in Section 9.2 shall not be used for a product for which it has to be indicated in the labelling or advertising that it contains GMOs, consists of GMOs, or is produced from GMOs.

9.5

As regards processed food, the labelling referred to in section 9.2 may be used:

(a) in the sales description, provided that the processed food complies with chapter 8 of this Standard and at least 95 % by weight, of its ingredients of agricultural origin are organic;

(b) only in the list of ingredients, provided that the food complies with this Standard (c) in the list of ingredients and in the same visual field as the sales description, provided that:

- the main ingredient is a product of hunting or fishing
- it contains other ingredients of agricultural origin that are all organic;
- the food complies with this Standard.

The list of ingredients shall indicate which ingredients are organic.

In this case the references to the organic production method may only appear in relation to the organic ingredients and the list of ingredients shall include an indication of the total percentage of organic ingredients in proportion to the total quantity of ingredients of agricultural origin. The terms and the indication of percentage shall appear in the same colour, identical size and style of lettering as the other indications in the list of ingredients.

9.6

All ingredients of a multi-ingredient product shall be listed on the product label in order of their weight percentage. It shall be apparent which ingredients are of organic certified origin and which are not. All additives shall be listed with their full name. If herbs and/or spices constitute less than 2% of the total weight of the product, they may be listed as "spices" or "herbs" without stating the percentage.

9.7

Added water and salt shall not be included in the percentage calculations of organic ingredients.

9.8

Where a minimum of 95% of the ingredients are of certified organic origin to the OK standard equivalent to the EU Regulations 834/2007 and 889/2008, products may be labelled "certified organic" and can carry the EU-logo described in EU Regulation

271/2010. The requirements in Annex 11 on how to use and print the EU-logo shall be followed.

9.9

Where EU organic logo is used, Organska Kontrola EU code number shall also appear in the labelling Note. and be placed in the same visual field as the Organic logo of the EU.

9.10

If the EU logo is used, an indication of where the product has been farmed or where the agricultural ingredients have been farmed shall also appear in the same visual field as the logo and shall take one of the following forms, as appropriate:

- 'non-EU Agriculture', where the ingredients has been farmed in countries outside the EU,

The indication 'non-EU' may be replaced or supplemented by a country in the case where all ingredients are produced in that country. For ingredients used in a small quantity and with a total maximum of 2% of the weight of the product, the indication is not needed.

The indication shall not appear in a colour, size and style of lettering more prominent than the sales description of the product.

9.11

The indication of origin shall be placed immediately below the EU-logo and the Organska Kontrola EU code number.

9.12

As regards pre-packaged food the EU organic logo may also appear on the packaging.

9.13

The EU-logo, the Organska Kontrola EU code and the indication of origin shall be marked in a place so it is easy to see, read and can't be taken away.

9.14 Standard for production intended to be sold in BH and other markets outside the EU

Where less than 95% but not less than 70% of the ingredients are of certified organic origin, products may not be called "organic". The word "organic" may be used on the principal display in statements like "made with organic ingredients". The OK mark can be used provided there is a clear statement of the proportion of the organic ingredients close to the mark.

10 Appendices

In organic agriculture the maintenance of soil fertility is achieved through the recycling of minerals and organic matter where the nutrients are made available to crops through the activity of soil micro-organisms. Pests, diseases, and weeds can be managed through cultural practices. Organic foods are processed primarily by biological, mechanical, and physical means.

Products and substances contained in the restricted list may only be used in so far as the corresponding use is authorised in general agriculture under national law.

Appendix 1 Fertilizers and Soil Conditioners

Name	Description, compositional requirements,
Former and moneying alsoner and areas	conditions for use
Farmyard manure, slurry and urine	Factory farming origin forbidden.
	Liquid animal excrements: use after controlled
	fermentation and/or appropriate dilution.
Dried farmyard manure and dehydrated poultry manure	Factory farming origin forbidden.
Composted animal excrements, including poultry manure and composted farmyard manure	Factory farming origin forbidden.
included	
Dejecta of worms (vermicompost) and insects	
Products or by-products of animal origin: Blood	Fur: maximum concentration in mg/kg of dry
meal, meat meal, bone meal, Hoof and horn	matter of chromium (VI): not detectable.
meal, feather meal, fish meal, meat meal, wool,	Hydrolysed proteins: Not to be applied to edible
fur, hair, dairy products, hydrolysed proteins	parts of the crop.
Products and by-products of plant origin for	Example: oilseed cake meal, cocoa husks, malt
fertilisers	culms
Hydrolysed proteins of plant origin	
Crop and vegetable residues, mulch, green	
manure, straw	
Sawdust and wood chips, composted bark, wood ash	Wood not chemically treated after felling
Seaweed and seaweed products	As far as directly obtained by:
Seaweed and seaweed products	 physical processes including
	dehydration, freezing and grinding
	 extraction with water or aqueous acid
	and/or alkaline solution
	- fermentation
Peat	Use limited to horticulture (market gardening,
	floriculture, arboriculture, nursery).
Plant preparations and extracts	Only with prior authorisation by Organska
	kontrola
Compost made from ingredients listed in this	
appendix, spent mushroom waste, humus from	
worms and insects, urban composts from	
separated sources which are monitored for	
contamination	
Guano	
Composted or fermented mixture of vegetable	Product obtained from mixtures of vegetable
matter	matter, which have been submitted to
	composting or to anaerobic fermentation for
	biogas production.
Biogas digestate containing animal by-products	Animal by-products (including by-products of
co-digested with material of plant or animal	wild animals) of category 3 and digestive tract
origin as listed in this Annex.	content of category 2 (categories 2 and 3 as

	defined in Regulation (EC) No 1069/2009 of the
	European Parliament and of the Council. Must
	not be from factory farming origin. The
	Processes have to be in accordance with
	Commission Regulation (EU) No 142/2011. Not
	to be applied to edible parts of the crop.
Basic slag	
Stillage and stillage extract	Ammonium stillage excluded
Calcium carbonate, for instance: ground	Only of natural origin
limestone, marl, chalk, Breton ameliorant	
(maerl), phosphate chalk.	
Mollusc waste	Only from sustainable fisheries or organic
P. 1.11	aquaculture
Egg shells	Factory farming origin forbidden
Gypsum (calcium sulphate)	Only of natural origin
Calcium chloride solution	Foliar treatment of apple trees, after
	identification of deficit of calcium
Magnesium and calcium carbonate	Only of natural origin, e.g. magnesian chalk,
	ground magnesium, limestone
Magnesium rock, kieserite (magnesium sulphate)	Only of natural origin
Crude potassium salt or kainit	
Potassium sulphate, possibly containing	Product obtained from crude potassium salt by a
magnesium salt	physical extraction process, containing possibly
	also magnesium salts
Soft ground rock phosphate	Cadmium content less than or equal to 90 mg/kg of P205
Aluminium-calcium phosphate	Cadmium content less than or equal to 90 mg/kg of P205 Use limited to basic soils ($pH > 7,5$)
Industrial lime from sugar production	By-product of sugar production from sugar beet and sugar cane
Industrial lime from vacuum salt production	By-product of vacuum salt production from brine
ľ	found in mountains
Pulverized rock, stone meal	
Clay (e.g. bentonite, perlite, vermiculite, zeolite)	
Sodium chloride	
Trace elements	
Elemental sulphur	
Leonardite (raw organic sediment rich in humic	Only if obtained as a by-product of mining
acids)	activities.
Humic and fulvic acids	Only if obtained by inorganic salts/solutions
	excluding ammonium salts; or obtained from
	drinking water purification
Chitin (Polysaccharide obtained from the shell of	Only if obtained from sustainable fisheries or
crustaceans)	organic aquaculture.
Xylite	Only if obtained as a by-product of mining
	activities (e.g. by-product of brown coal mining)
Organic rich sediment from fresh water bodies	Only organic sediments that are by-products of
formed under exclusion of oxygen (e.g.	fresh water body management or extracted from
tormed ander exclusion of oxygen (e.g.	mean water body management of extracted fioli

sapropel).	former freshwater areas.
	When applicable, extraction should be done in a
	way to cause minimal impact on the aquatic
	system.
	Only sediments derived from sources free from
	contaminations of pesticides, persistent organic
	pollutants and petrol like substances.
	Maximum concentrations in mg/kg of dry
	matter: cadmium: 0,7; copper: 70; nickel: 25;
	lead: 45; zinc: 200; mercury: 0,4; chromium
	(total): 70; chromium (VI): not detectable.
Biochar — pyrolysis product made from a wide	Only from plant materials, untreated or treated
variety of organic materials of plant origin and	with products included in Annex II.
applied as a soil conditioner.	Maximum value of 4 mg polycyclic aromatic
	hydro-carbons (PAHs) per kg dry matter (DM).
	This value shall be reviewed every second year,
	taking into account the risk of accumulation due
	to multiple applications.
Biodegradable processing by-products of	
microbial origin, e.g. by-products of brewery or	
distillery processing.	
Microbiological preparations based on naturally	Not from GMO origin
occurring organisms	
Biodynamic preparations	

Appendix 2 Crop Protectants

1. Plant and Animal Origin

Name	Description, compositional requirements, conditions for use
Allium sativum (garlic extract)	
Basic substances based on food (including: lecithins, sucrose, fructose, vinegar, whey, chitosan hydrochloride obtained from sustainable fisheries or organic aquaculture, Equisetum arvense etc.)	Only basic substances covered by the definition "foodstuff". Not to be used as herbicides, only for the control of pests and diseases.
Beeswax	Only as pruning agent/wound protectant.
COS-OGA	
Hydrolysed proteins excluding gelatine	
Laminarin	Kelp shall be either grown organically or harvested in a sustainable way.
Maltodextrin	
Pheromones	Only in traps and dispensers.
Azadirachtin extracted from Neem tree (<i>Azadirachta indica</i>)	
Plant oils	Only with prior authorisation by Organska kontrola All uses authorised, except herbicide.
Plant preparations	Only with prior authorisation by Organska kontrola
Animal or plant based repellents by smell/sheep fat	Only on non-edible parts of the crop and where crop material is not ingested by sheep and goats.
Quassia extracted from Quassia amara	Only as insecticide, repellent
Pyrethrins	Only from plant origin
Pyrethroids (only deltamethrin or lambdacy- halothrin)	Only in traps with specific attractants; only against <i>Bactrocera oleae</i> and <i>Ceratitis capitata</i> Wied.
Salix spp. Cortex (willow bark extract)	
Terpenes (eugenol, geraniol and thymol)	

2. Microorganisms

Name	Description, compositional requirements, conditions for use
Micro-organisms	Not from GMO origin
Spinosad	
Cerevisane	

3. Other

Name	Description, compositional requirements,
	conditions for use
Aluminium silicate (Kaolin)	
Copper compounds in the form of: copper	
hydroxide, copper oxychloride, copper oxide,	
Boreaux mixture, and tribasic copper sulphate	
Diammonium phosphate	Only as attractant in traps
Diatomaceous earth (kieselgur)	
Lime sulphur (Calcium polysulphide)	
Paraffin oil	Only with prior authorisation by Organska kontrola
Potassium and sodium bicarbonate (potassium	
and sodium hydrogen carbonate)	
Quartz sand	
Sulphur	
Calcium hydroxide	When used as fungicide, only in fruit trees,
	including nurseries, to control Nectria galligena.
Carbon dioxide	
Ethylene	
Fatty acids	All uses authorised, except herbicide.
Ferric phosphate (iron (III) orthophosphate)	Preparations to be surface-spread between cultivated plants.
Hydrogen peroxide	
Sodium chloride	All uses authorised except herbicide
Biodynamic preparations	
Homeopathic preparations	
Physical methods (e.g. chromatic traps,	
mechanical traps,)	
Release of parasites, predators and sterilized	
insects	

Appendix 3 List of Approved Food Additives and Processing Aids

Food additives marked with an asterisk in the column of the code number shall be calculated as ingredient of agricultural origin.

Code	Name			Preparation of foodstuffs of		Limitation / Note	
		Additive	Processing Aid	plant origin	animal origin		
E 153	Vegetable carbon	Х			Х	Ashy goat cheese; Morbier cheese.	
E 160b*	Annatto, Bixin, Norbixin	Х			X	Red Leicester cheese; Double Gloucester cheese; Cheddar; Mimolette cheese.	
E 170	Calcium carbonate	Х	Х	Х	Х	When used as additive: Shall not be used for colouring or calcium enrichment of products. When used as processing aid: Preparation of foodstuffs of plant origin only.	
E 220	Sulphur dioxide	Х		Х	X (only for mead)	In fruit wines (wine made from fruits other than grapes, including cider and perry) and mead with and without added sugar : 100 mg (max. levels available from all sources, expressed in SO ₂ in mg/l)	
E 224	Potassium metabisulphite	Х		Х	X (only for mead)	In fruit wines (wine made from fruits other than grapes, including cider and perry) and mead with and without added sugar : 100 mg (max. levels available from all sources, expressed in SO ₂ in mg/l)	
E 250	Sodium nitrite	х			X	For meat products (This additive can only be used, if it has been demonstrated to the satisfaction of the OK that no technological alternative, giving the same guarantees and/or allowing to maintain the specific features of the product, is available. Not in combination with E252. Indicative ingoing amount expressed as NaNO2: 80mg/kg, max. residual amount expressed as NaNO2: 50 mg/kg	
E 252	Potassium nitrate	х			X	For meat products (This additive can only be used, if it has been demonstrated to the satisfaction of the OK that no technological alternative, giving the same guarantees and/or allowing to maintain the specific features of the product, is available. Not in combination with E250. Indicative ingoing amount expressed as NaNO3: 80 mg/kg, max. residual amount expressed as NaNO3: 50 mg/kg.	

Table 1 List of Approved Food Additives and Processing Aids

E 270	Lactic acid	Х	X	X	X	 When used as processing aid: Preparation of foodstuffs of animal origin only. With regard to foodstuffs of animal origin - For the regulation of the pH of the brine bath
						in cheese production
E 290	Carbon dioxide	X	Х	X	X	
E 296	Malic acid	X		X		
E 300	Ascorbic acid	Х		X	X	With regard to foodstuffs of animal origin: Meat products
E 301	Sodium ascorbate	Х			X	With regard to foodstuffs of animal origin: Meat products in connection with nitrates and nitrites
E 306*	Tocopherol-rich extract	Х		X	X	Anti-oxidant
E 322*	Lecithins	Х		X	X	With regard to foodstuffs of animal origin: Milk products . Only when derived from organic production. Applicable as of 1 January 2022. Until that date, only when derived from organic raw material.
E 325	Sodium lactate	Х			X	Milk-based and meat products
E 330	Citric acid	Х	Х	X	X	
E 331	Sodium citrates	X		X	X	
E 333	Calcium citrates	Х		Х		
E 334	Tartaric acid (L(+)-)	Х		X	X (only for mead)	With regard to foodstuffs of animal origin: Mead.
E 335	Sodium tartrate	Х		X		
E336	Potassium tartrate	Х		X		
E 341(i)	Mono calcium phosphate	Х		X		Raising agent for self-raising flour
E 392*	Extracts of rosemary	Х		X	X	Only when derived from organic production.
E 400	Alginic acid	X		X	X	With regard to foodstuffs of animal origin: Milk-based products
E 401	Sodium alginate	X		X	X	With regard to foodstuffs of animal origin: Milk-based products and sausages based on meat
E 402	Potassium alginate	Х		X	X	With regard to foodstuffs of animal origin: Milk-based products
E 406	Agar	Х		X	X	With regard to foodstuffs of animal origin: Milk-based and meat products
E 407	Carrageenan	X		X	X	With regard to foodstuffs of animal origin: Milk-based products
E 410*	Locust bean gum	X		X	X	Only when derived from organic production. Applicable as of 1 January 2022.
E 412*	Guar gum	X		X	X	Only when derived from organic production. Applicable as of 1 January 2022.
E 414*	Arabic gum	X		X	X	Only when derived from organic production. Applicable as of 1 January 2022.
E 415	Xanthan gum	X		X	X	
E417	Tara gum powder	Х		Х	Х	Thickener Only when derived from organic production. Applicable as of 1 January 2022.

E 418	Gellan gum	X		X	X	High-acyl form only. Only when derived from organic production. Applicable as of 1 January 2022.
E 422	Glycerol	X		X	X	Only from plant origin. Only when derived from organic production. Applicable as of 1 January 2022. For plant extracts and flavourings, humectants in gel capsules and as a surface coating of tablets.
E 440 (i)*	Pectin	X		X	X	With regard to foodstuffs of animal origin: Milk-based products
E 464	Hydroxypropyl methyl cellulose	X		X	X	Encapsulation material for capsules
E 500	Sodium carbonates	X	Х	Х	Х	
E 501	Potassium carbonates	X	Х	X		When used as processing aid: With regard to foodstuffs of plant origin - Drying of grapes
E 503	Ammonium carbonates	X		X		
E 504	Magnesium carbonates	X		X		
E 509	Calcium chloride	X	X	X	X	 When used as additive: Preparation of foodstuffs of animal origin only. Milk coagulation. When used as processing aid: Coagulation agent. With regards to foodstuffs of animal origin: sausages based on meat
E 516	Calcium sulphate	X	Х	X		When used as additive: Carrier. When used as processing aid: Coagulation agent.
E 524	Sodium hydroxide	X	X	X		 When used as additive: Surface treatment of Laugengebäck bakery and regulation of acidity in organicflavourings. When used as processing aid: With regard to foodstuffs of plant origin: for sugar(s) production; for oil production excluding olive oil production; for the preparation of plant protein extracts.
E 551	Silicon dioxide	X	X	X	X	 When used as additive: For herbs and spices in dried powdered form, flavourings and propolis When used as processing aid (gel or colloidal solution): Preparation of foodstuffs of animal origin only.
E 553b	Talc	X	X	Х	X	When used as additive: With regard to foodstuffs of animal origin: surface treatment of sausages. When used as processing aid: Preparation of foodstuffs of plant origin only.
E 901	Beeswax	Х	X	Х		Beewax from organic production. When used as additive: - As a glazing agent for confectionary only, When used as processing aid: - Releasing agent.

E 903	Carnauba wax	X	X	X		 Only when derived from organic production. Applicable as of 1 January 2022. Until that date, only when derived from organic raw material. When used as additive: As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms. When used as processing aid: Releasing agent.
E 938	Argon	Х		X	X	
E 939	Helium	X		X	X	
E 941	Nitrogen	X	Х	X	X	
E 948	Oxygen	X		X	X	
E 968	Erythritol	X		X	Х	Only when derived from organic production without using ion exchange technology
	Water		Х	X	Х	Drinking water
	Calcium hydroxide		Х	X		
	L(+)lactic acid from fermentation		X	X		With regard to foodstuffs of plant origin: for the preparation of plant protein extracts
	Magnesium chloride (or nigari)		X	X		Coagulation agent
	Sulphuric acid		Х	X	Х	Gelatine production Sugar(s) production
	Hydrochloric acid		X		X	With regard to foodstuffs of animal origin: gelatine production; for the regulation of the pH of the brine bath in processing of Gouda, Edam and Maasdammer cheeses, Boerenkaas, Friese and Leidse Nagelkaas
	Hop extract		X	X		With regard to foodstuffs of plant origin: only for antimicrobial purposes in production of sugar. When available from organic production.
	Pine rosin extract		X	X		With regard to foodstuffs of plant origin: only for antimicrobial purposes in production of sugar. When available from organic production.
	Amonium hydroxide		Х		X	With regard to foodstuffs of animal origin: gelatine production
	Hydrogen peroxide		Х		X	With regard to foodstuffs of animal origin: gelatine production
	Diammonium phosphate		Х	Х	Х	Only for use in processing of fruit wines, including cider and perry and mead
	Tannin		X	<u> </u>		Only for wine (Standard for markets outside EU)
	Tannic acid		X	X X	V	Filtration aid
	Activated carbon Bentonite		X X	X X	X X	With regard to foodstuffs of animal origin: as a
	Casein		X	X		sticking agent for mead
	Diatomaceous earth		X	X	X	With regard to foodstuffs of animal origin: gelatine production

Egg white albumin	Х	X		
Ethanol	Х	X	X	Solvent
Gelatin	Х	X		
Isinglass	Х	Х		
Vegetable oils	Х	X	X	Greasing, releasing or anti-foaming agent. Only when derived from organic production.
Perlite	Х	X	X	With regard to foodstuffs of animal origin: Gelatine production
Cellulose	Х	X	X	With regard to foodstuffs of animal origin: Gelatine production
Hazelnut shells	Х	Х		
Rice meal	Х	X		
Acetic acid/vinegar	X		X	Only when derived from organic production. For fish processing only. From natural fermentation, not to be produced by or from GMO.
Thiamin hydrochloride	Х	X	X	Only for use in processing of fruit wines, including cider and perry and mead.
Wood fibre	X	X	X	The source of timber should be restricted to certified, sustainably harvested wood. Wood used must not contain toxic components (post- harvest treatment, naturally occurring toxins or toxins from microorganisms).

Product	Limitation/Note
Acetic acid	
Alcohol, ethyl (ethanol)	
Alcohol, isopropyl (isopropanol)	
Calcium hydroxide (slaked lime)	
Calcium hypochlorite	
Calcium oxide (quicklime)	
Chloride of lime (calcium oxychloride, calcium	
chloride, and calcium hydroxide)	
Chlorine dioxide	
Citric acid	
Formic acid	
Hydrogen peroxide	
Lactic acid	
Natural essences of plants	
Oxalic acid	
Ozone	
Peracetic acid	
Phosphoric acid	Only for dairy equipment
Plant extracts	
Potassium soap	
Sodium carbonate	
Sodium hydroxide (caustic soda)	
Sodium hypochlorite	E.g. as liquid bleach
Sodium soap	

Table 2. Cleansers and Disinfectants in Direct Contact with Food

Appendix 4 Minimum surface areas indoors and outdoors and other characteristics of housing in the different species and types of production

	Indoors area (net area available to animals)		Outdoors area (exercise area, excluding pasturage)
	Live weight minimum (kg)	m ² /head	m ² /head
Breeding and fattening	up to 100	1,5	1,1
bovine	up to 200	2,5	1,9
and equidae	up to 350	4	3
	over 350	5 with a minimum of $1 \text{ m}^2/100 \text{ kg}$	3,7 with a minimum of $0,75 \text{ m}^2/100 \text{ kg}$
Dairy cows		6	4,5
Bulls for breeding		10	30
Sheep and goats		1.5 sheep/goat	2,5
		0.35 lamb/kid	0,5
Farrowing sows with piglets up		7,5 sow	2,5
to 40 days			
Fattening pigs	up to 50	0.8	0,6
	up to 85	1,2	8,0
	up to 110	1,3	1
	over 110	1,5	1,2
Piglets	over 40 days and up to 30 kg	0,6	0,4
Brood pigs		2,5 female	1,9
		6 male If pens are used for natural service: 10 m ² /boar	0,8

1. Bovines, equidae, ovine, caprine and porcine

2. Poultry

	Indoors area (net area available to animals)			Outdoors area
	No animals/m ²	cm perch/animal	nest	(m ² of area available in rotation/head)
Laying hens	6	18	7 laying hens per nest or in case of common nest 120 cm ² /bird	4, provided that the limit of 170 kg of N/ha/year is not exceeded
Fattening poultry (in fixed housing)	10 with a maximum of 21 kg liveweight/m ²	20 (for guinea fowl only)		4 broilers and guinea fowl 4,5 ducks, 10 turkey, 15 geese. In all the species mentioned above the

			limit of 170 kg of N/ha/year is not exceeded
Fattening poultry in mobile housing	16 ⁽¹⁾ in mobile poultry houses with a maximum of 30 kg liveweight/m ²		2.5, provided that the limit of 170 kg of N/ha/year is not exceeded
(1) Only in the case of mobile houses not exceeding 150 m^2 floor space.			

Appendix 5 Minimum number of animals per hectare

Class or species	Maximum number of animals per ha equivalent to 170 kg N/ha/year
Equines over six months old	2
Calves for fattening	5
Other bovine animals less than one year old	5
Male bovine animals from one to less than two years old	3,3
Female bovine animals from one to less than two years old	3,3
Male bovine animals two years old or over	2
Breeding heifers and Heifers for fattening	2,5
Dairy cows and Cull dairy cows	2
Other cows	2,5
Female breeding rabbits	100
Ewes and Goats	13,3
Piglets	74
Breeding sows	6,5
Pigs for fattening and Other pigs	14
Table chickens	580
Laying hens	230

Appendix 6 Feeds materials as referred to in section 5.6.17, 5.6.18. and 5.7.2.

1. Feed materials of mineral origin

- Calcareous marine shells
- Maerl
- Lithotamn
- Calcium gluconate
- Calcium carbonate
- Defluorinated monocalciumphosphate
- Defluorinated dicalciumphosphate
- Magnesium oxide (anhydrous magnesia)
- Magnesium sulphate
- Magnesium chloride
- Magnesium carbonate
- Calcium magnesium phosphate
- Magnesium phosphate
- Monosodium phosphate
- Calcium sodium phosphate
- Sodium chloride
- Sodium bicarbonate
- Sodium carbonate
- Sodium sulphate
- Potassium chloride

2. Other feed materials

Fermentation (by-)products from microorganisms the cells of which have been inactivated or killed:

- Saccharomyces cerevisiae
- Saccharomyces carlsbergiensis

Appendix 7. Feed additives used as in animal nutrition

Additives listed must have been approved under Regulation (EC) No 1831/2003 of the European Parliament and of the Council on additives for use in animal nutrition.

1. Technological additives

a) Preservatives

- E 200 Sorbic acid,
- E 236 Formic acid,
- E 237 Sodium formate
- E 260 Acetic acid,
- E 270 Lactic acid,
- E 280 Propionic acid,
- E 330 Citric acid.

b) Antioxidants

- 1b306(i) Tocopherol extracts from vegetable oils
- 1b306(ii) Tocopherol-rich extracts from vegetable oils (delta rich).

c) Binders and anti-caking agents

E 412 Guar gum

- E 551b Colloidal silica,
- E 551c Kieselgur (diatomaceous earth, purified),
- 1m558i Bentonite,
- E 559 Kaolinitic clays, free of asbestos
- E 560 Natural mixtures of stearites and chlorite,
- E 561 Vermiculite,
- E 562 Sepiolite,
- E 599 Perlite,
- E 566 Natrolite-Phonolite
- 1g568 Clinoptilolite of sedimentary origin

E 535 Sodium ferrocyanide – maximum dose rate of 20 mg/kg NaCl calculated as ferrocyanide anion.

d) Silage additives

- 1k Enzymes, microorganisms
- 1k236 Formic acid
- 1k237 Sodium formate
- 1k280 Propionic acid
- 1k281 Sodium propionate

Use restricted to production of silage when weather conditions do not allow for adequate fermentation. The use of formic, propionic acid and their sodium salts in the production of silage shall only be permitted when weather conditions do not allow for adequate fermentation.

2. Sensory additives

2b Flavouring compounds (Only extracts from agricultural products) *Castanea sativa* Mill.: Chestnut extract

3. Nutritional additives

a) Vitamins, provitamins and chemically well-defined substances having similar effect

3a Vitamins and provitamins:

- derived from agricultural products;
- If derived Synthetically, only those identical to natural vitamins may be used for monogastric animals;
- If derived synthetically, only vitamins A, D, and E identical to natural vitamins may be used for ruminants with prior authorisation of the Organska Kontrola based on the assessment of the possibility for organic ruminants to obtain the necessary quantities of the said vitamins through their feed rations.

3a920 Betaine anhydrous:

- Only for monogastric animals.
- Only from natural origin and when available from organic origin).

b) Compounds of trace elements

- E1 Iron
- 3b101 Iron(II) carbonate (siderite),
- 3b103 Iron (II) sulphate monohydrate
- 3b104 Iron (II) sulphateheptahydrate,
- 3b201 Potassium iodide
- 3b202 Calcium iodate, anhydrous
- 3b203 Coated granulated calcium iodate anhydrous
- 3b301 Cobalt(II) acetate tetrahydrate
- 3b302 Cobalt(II) carbonate
- 3b303 Cobalt(II) carbonate hydroxide (2:3) monohydrate
- 3b304 Coated granulated cobalt(II) carbonate hydroxide (2:3) monohydrate
- 3b305 Cobalt(II) sulphate heptahydrate,
- 3b402 Copper(II) carbonate dihydroxy monohydrate3b404 copper(II) oxide
- 3b405 copper sulphate pentahydrate;
- 3b409 Dicopper chloride trihydroxide (TBCC)
- 3b502 Manganese (II) oxide
- 3b503 Manganese sulfate, monohydrate;
- 3b603 Zinc oxide,
- 3b604 Zinc sulphate heptahydrate,
- 3b605 Zinc sulphate monohydrate,

3b609 Zinc chloride hydroxide monohydrate (TBZC);

3b701 Sodium molybdate dihydrate;

3b801 Sodium selenite,

3b8.10, 3b8.11, 3b8.12, 3b813 and 3b817 Selenised yeast inactivated.

4. Zootechnical additives

4a, 4b, 4c and 4d Enzymes and micro-organisms in the category of "Zootechnical additives".

Appendix 8 Products for cleaning and disinfection of buildings and installation for animal production

- Potassium and sodium soap,
- Water and steam,
- Milk of lime,
- Lime,
- Quicklime,
- Sodium hypochlorite (e.g. as liquid bleach),
- Caustic soda,
- Caustic potash,
- Hydrogen peroxide,
- Natural essences of plants,
- Citric, peracetic acid, formic, lactic, oxalic and acetic acid,
- Alcohol,
- Nitric acid (dairy equipment),
- Phosporic acid (dairy equipment),
- Formaldehyde,
- Cleaning and disinfection products for teats and milking facilities,
- Sodium carbonate.

Appendix 9 Products and substances used in farming and criteria for their authorisation (Ref: (EC) No. 834-Article 16)

Introduction

Organic production shall be based on the following principles:

a. the appropriate design and management of biological processes based on ecological systems using natural resources which are internal to the system by methods that:

- i. use living organisms and mechanical production methods;
- ii. practice land-related crop cultivation and livestock production which complies with the principle of sustainable exploitation of fisheries;
- iii. exclude the use of GMOs and products produced from or by GMOs with the exception of veterinary medicinal products;
- iv. are based on risk assessment, and the use of precautionary and preventive measures, when appropriate;

b. the restriction of the use of external inputs. Where external inputs are required or the appropriate management practices and methods referred to in paragraph (a) do not exist, these shall be limited to:

- i. inputs from organic production;
- ii. natural or naturally-derived substances;
- iii. low solubility mineral fertilisers;

c. the strict limitation of the use of chemically synthesised inputs to exceptional cases these being:

- i. where the appropriate management practices do not exist; and
- ii. the external inputs referred to in paragraph (b) are not available on the market; or
- iii. where the use of external inputs referred to in paragraph (b) contributes to unacceptable environmental impacts;

d. the adaptation, where necessary, and within the framework of this Standard, of the rules of organic production taking account of sanitary status, regional differences in climate and local conditions, stages of development, and specific husbandry practices.

Products and substances used in farming and criteria for their authorisation

1. The Organska Kontrola may authorise for use in organic production and include in a restricted list the products and substances, which may be used in organic farming for the following purposes:

- a. as plant protection products;
- b. as fertilisers and soil conditioners;
- c. as non-organic feed materials from plant origin, feed material from animal and mineral origin and certain substances used in animal nutrition;
- d. as feed additives and processing aids;
- e. as products for cleaning and disinfection of ponds, cages, buildings and installations for animal production;

f. as products for cleaning and disinfection of buildings and installations used for plant production, including storage on an agricultural holding.

Products and substances contained in the restricted list may only be used in so far as the corresponding use is authorised in general agriculture under national law.

2. The authorisation of the products and substances referred to in paragraph 1 is subject to the objectives and principles laid down in Introduction to this Appendix and the following general and specific criteria which shall be evaluated as a whole:

- a. their use is necessary for sustained production and essential for its intended use;
- b. all products and substances shall be of plant, animal, microbial or mineral origin except where products or substances from such sources are not available in sufficient quantities or qualities or if alternatives are not available;
- c. in the case of products referred to in paragraph 1 (a), the following shall apply:
 - (i) their use is essential for the control of a harmful organism or a particular disease for which other biological, physical or breeding alternatives or cultivation practices or other effective management practices are not available;
 - (ii) if products are not of plant, animal, microbial or mineral origin and are not identical to their natural form, they may be authorised only if their conditions for use preclude any direct contact with the edible parts of the crop;
- d. in the case of products referred to in paragraph 1 (b), their use is essential for obtaining or maintaining the fertility of the soil or to fulfil specific nutrition requirements of crops, or specific soil-conditioning purposes;
- e. in the case of products referred to in paragraph 1 (c) and (d), the following shall apply:
 - (i) they are necessary to maintain animal health, animal welfare and vitality and contribute to an appropriate diet fulfilling the physiological and behavioural needs of the species concerned or it would be impossible to produce or preserve such feed without having recourse to such substances;
 - (ii) feed of mineral origin, trace elements, vitamins or provitamins shall be of natural origin. In case these substances are unavailable, chemically well-defined analogic substances may be authorised for use in organic production.
- 3.
- a. The Organska Kontrola may lay down conditions and limits as regards the agricultural products to which the products and substances referred to in paragraph 1 can be applied to, the application method, the dosage, the time limits for use and the contact with agricultural products and, if necessary, decide on the withdrawal of these products and substances.
- b. Where Organska Kontrola considers that a product or substance should be added to, or withdrawn from the list referred to in paragraph 1, or that the specifications of use mentioned in subparagraph should be amended, the Organska Kontrola shall ensure that a dossier giving the reasons for the inclusion, withdrawal or

amendments is sent officially to the Commission. Requests for amendment or withdrawal, as well as decisions thereon, shall be published.

c. Products and substances used before January 1, 2009 for purposes corresponding to those laid down in paragraph 1 of this Appendix may continue to be used after this date. Organska Kontrola may in any case withdraw such products or substances.

4. Organska Kontrola may regulate the use of products and substances in organic farming for purposes different than those mentioned in paragraph 1 provided their use is subject to objectives and principles of organic production defined in this Standard and the general and specific criteria set out in paragraph 2, and in so far as it respects national law. The Organska Kontrola shall inform the Commission of such rules.

5. The use of products and substances not covered under paragraph 1 and 4, and subject to the objectives and principles of organic production and the general criteria in this Appendix, shall be allowed in organic farming.

Appendix 10 Criteria for certain products and substances in processing (Ref: (EC) No. 834-Article 21)

1. The authorisation of products and substances for use in organic production and their inclusion in a restricted list of the products and substances referred to section 8.2.2 shall be subject to the objectives and principles laid down in chapter 1 and the following criteria, which shall be evaluated as a whole:

- i. alternatives authorised in accordance with this chapter are not available;
- ii. without having recourse to them, it would be impossible to produce or preserve the food or to fulfil given dietary requirements provided for on the basis of the EU legislation.

In addition, the products and substances referred to in section 8.2.2 of this Standard are to be found in nature and may have undergone only mechanical, physical, biological, enzymatic or microbial processes, except where such products and substances from such sources are not available in sufficient quantities or qualities on the market.

Where Organska Kontrola considers that a product or substance should be added to, or withdrawn from the list referred to in paragraph 1, or that the specifications of use mentioned in this paragraph should be amended, Organska Kontrola shall ensure that a dossier giving the reasons for the inclusion, withdrawal or amendments is sent officially to the Commission.

Products and substances used before January 1, 2009 and falling under section 8.2.2 of this Standard may continue to be used after that date. Organska Kontrola may, in any case, withdraw such products or substances.