

ATS – HIGH-QUALITY HONEY

SINGLE NATIONAL REGULATION FOR THE NATIONAL ANIMAL HUSBANDRY QUALITY SYSTEM FOR **CERTIFIED QUALITY HONEY**

SHEET 6 PRODUCTION REGULATIONS FOR

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1. OBJECTIVES AND REGULATORY REFERENCES

1.1. Objectives

SQNZ (Sistema di Qualità Nazionale Zootechnia) Certified Quality Honey is promoted with the aim of

- a) Highlighting products whose characteristics exceed current commercial standards by virtue of their production area, processing methods and management of the final product;
- b) Highlighting the quality of honey, including based on the product's indication of origin;
- c) Ensuring greater profitability for businesses in the beekeeping sector;
- d) Protecting the product's origin and intrinsic qualities by ensuring compliance with the specifications, combating fraud and strengthening the system of controls;
- e) Providing a product capable of meeting the demand of consumers seeking specific values associated with the product in question (respect for the environment, naturalness, food safety, distinctive organoleptic characteristics);
- f) Offering products whose quality is more readily apparent to consumers and non-domestic traders;
- g) Launching promotional campaigns for SQNZ-certified honey that highlight the objective superiority of its quality, combined with a distinctive product identity.

These specifications apply to all stages of beekeeping and product management as set out below

- a) Breeding;
- b) Processing (*including harvesting and extraction*);
- c) Packaging;
- d) Storage until the point of sale;
- e) Distribution.

The specifications provide for

- a) The adoption of parameters and processes aimed at achieving a standard of food quality that is significantly higher than that set by current regulations in terms of **public health, animal welfare, environmental protection and social sustainability**;

- b) The adoption of a system of control, traceability and labelling that goes beyond current commercial standards, to protect consumers from potential food fraud;
- c) The possibility of obtaining other types of certification, such as PDO, PGI, organic, biodynamic, integrated production, UNI and ISO.

The specification applies solely to the product 'honey' and not to other bee products which have different production characteristics.

These specifications exclude honey for industrial use from this specific 'National Livestock Quality Scheme'.

1.2. Regulatory framework

The *National Livestock Quality Scheme for Honey* has its legal basis in the following regulations

1. **Departmental Decree of 25 October 2011** – Guidelines for the drafting of production specifications for livestock products falling within the National Livestock Quality Scheme.
2. **Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013** establishing a common organisation of the markets in agricultural products.
3. **Regulation (EU) No 2021/2115 of the European Parliament and of the Council of 2 December 2021** laying down rules on support for the strategic plans to be drawn up by Member States under the common agricultural policy (CAP strategic plans) and financed by the European Agricultural Guarantee Fund (EAGF) and the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No 1305/2013 and (EU) No 1307/2013;
4. **Regulation (EU) No 2021/2117 of the European Parliament and of the Council of 2 December 2021 amending Regulations (EU) No 1308/2013** establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and protection of geographical indications of aromatised wine products, and (EU) No 228/2013 laying down specific measures in the agricultural sector for the outermost regions of the Union;

5. **Commission Delegated Regulation (EU) No 2022/126 of 7 December 2021 (Article 47)** supplementing Regulation (EU) 2021/2115 of the European Parliament and of the Council with additional requirements for certain types of intervention specified by Member States in their respective CAP Strategic Plans for the period 2023 to 2027 in accordance with that Regulation, as well as for the rules on good agricultural and environmental conditions;
6. **Ministerial Decree No 646632 of 16 December 2022** establishing the National Livestock Quality Scheme, recognised at national level pursuant to Commission Delegated Regulation (EU) 2022/126 of 7 December 2021 supplementing Regulation (EU) 2021/2115 of the European Parliament and of the Council with additional requirements for certain types of intervention specified by Member States in their respective CAP Strategic Plans for the period 2023 to 2027 in accordance with that Regulation, as well as for the rules on good agricultural and environmental conditions, and repealing the Ministerial Decree of 4 March 2011 – “Regulation of the national livestock quality scheme recognised at national level pursuant to Commission Regulation (EC) No 1974/2006”.
7. **Legislative Decree No. 134 of 5 August 2022** - Provisions concerning the system for the identification and registration of operators, establishments and animals, for the purpose of bringing national legislation into line with the provisions of Regulation (EU) 2016/429, pursuant to Article 14(2)(a), (b), (g), (h), (i) and (p) of Law No. 53 of 22 April 2021. (Official Journal, General Series No. 213 of 12 September 2022) .
8. **Legislative Decree No. 179 of 21 May 2004** – Implementation of Directive 2001/110/EC on the production and marketing of honey (as amended).
9. **Law No. 313 of 24 December 2004** concerning ‘Regulation of beekeeping’.
10. **MIPAAF Circular No. 1 of 8 March 2005 and MIPAAF Circular No. 4 of 31 May 2012** – implementing Legislative Decree No. 179 of 21 May 2004 on the production and marketing of honey.
11. **Regulation (EC) No 852/2004** of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs.
12. **Regulation (EC) No 853/2004** of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin.

13. **Commission Regulation (EC) No 2074/2005** of the Commission of 5 December 2005 laying down implementing rules for certain products covered by Regulation (EC) No 853/2004 of the European Parliament and of the Council and for the organisation of official controls pursuant to Regulations (EC) No 854/2004 and (EC) No 882/2004, derogating from Regulation (EC) No 852/2004 of the European Parliament and of the Council and amending Regulations (EC) No 853/2004 and (EC) No 854/2004.
14. **Regulation (EU) No 2017/625** of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, and amending Regulations ...(omitted..).

Article 47 of Commission Delegated Regulation (EU) No 2022/126 of 7 December 2021, implemented by Ministerial Decree 646632/2022 stipulates that quality schemes for specific products recognised at the national level must be governed by production specifications that comply with the following criteria:

- a) mandatory requirements for the protection of the product, which ensure
 - Specific product characteristics;
 - Specific production methods,
 - A final product of a quality that is significantly higher than current commercial standards in terms of public health, plant health, animal welfare and environmental protection;
- b) Be open to all producers;
- c) Provide for binding production regulations, compliance with which is verified by one or more independent inspection bodies;
- d) Be transparent and ensure full product traceability.

2. DEFINITIONS

For these specifications, the following definitions apply

- a) **Honey:** A natural sweet substance produced by bees (*Apis mellifera*) from the nectar of plants or from secretions from living parts of plants, or from substances secreted by sap-sucking insects found on living parts of plants, which the bees collect, transform by combining them with their own specific substances, deposit, dehydrate, store and allow to mature in the honeycombs of the hive.
- b) **Beekeeping supply chain:** The entirety of all the stages and the relevant operators involved, through which honey passes from the primary production of the food product to its distribution to the end consumer.

- c) **Supply chain operators:** All operators, whether individual or organised into associations, involved in the stages of: rearing, production, processing/manufacturing, packaging, distribution, serving and handling of the food product, from primary production to consumption.
- d) **Material flows:** The movement of any material at any point in the relevant agri-food supply chain.
- e) **Batch:** A set of sales units of a food product, produced, manufactured or packaged under virtually identical conditions.
- f) **Batch identification:** The process of assigning a unique code to a batch.
- g) **Traceability:** The ability to trace and track the journey of a food product through all stages of production, processing and distribution.
- h) **Traceability system:** The entirety of data and operations that enable the desired information about a product and its components to be maintained throughout all or part of its supply chain, covering rearing, production, packaging and distribution.
- i) **SQNZ Honey Specification:** This specification comprises the following components
 - i. A general section containing a description of the product with its superior characteristics, the relevant production processes and an identification of the features that distinguish it from conventional products;
 - ii. Control plan, comprising: 1. Self-monitoring plan; 2. Control plan.
- j) **Ministry:** Ministry of Agriculture, Food Sovereignty and Forestry.
- k) **Applicant:** The party applying to the Control Body for permission to use the designation set out in the SQNZ Honey Specification and for the relevant certification, subject to a commitment to maintain compliance with the requirements of the specification over time.
- l) **Control Body:** A public authority or private control body, chosen by the operator, which carries out inspections and certifications in the agri-food sector in accordance with the provisions of the specification. In the case of private control bodies, these must be accredited in accordance with the most recent version published in the Official Journal of the European Union, Series C, of European standard EN 45011 or ISO Guide 65 'General requirements for bodies operating product certification systems'.
- m) **B.D.N.:** National Database of the Animal Identification and Registration System (**I&R system**), the official source of data on the I&R system for establishments, operators, transporters, and animals. For producers who do not have their registered office or place of business in Italy, it will be necessary to specify the national authority or **equivalent technical body or organisation** responsible for certifying the identification and registration of animals.

3. PRODUCT CLASSIFICATION

The product 'honey', which is the subject of these specifications, is classified as follows

Product name	Honey
CN code (Combined Nomenclature)	0409 00 00
Product class	Live animals and animal products
Product category	Milk and milk products; birds' eggs; natural honey ; edible products of animal origin, not elsewhere specified or included.
Product intended for the final consumer	YES

Honey consists mainly of various sugars (carbohydrates), primarily fructose and glucose, water, and other substances such as organic acids, enzymes and solid particles derived from the honey harvest, with the median values as follows

- ❖ Sugars 66–83 % (glucose, fructose, sucrose, other oligosaccharides)
- ❖ Water content 13-20 %
- ❖ Gums and dextrins 1-5 %
- ❖ Protein 1 %
- ❖ Minerals 0.05–0.3 %
- ❖ Enzymes, organic acids (traces)

The colour of honey can vary from an almost colourless shade (bright white) to amber with red highlights, to dark brown and even green, depending on the nectar collected by the bees, the flowers (botanical species) and also the time of harvest.

For these specifications, the following is assumed:

Honey: pursuant to Legislative Decree No. 179 of 21 May 2004,, *implementing Directive 2001/110/EC on the production and marketing of honey*, ‘honey’ means the natural sweet substance that bees (*Apis mellifera*) produce from the nectar of plants or from secretions from living parts of plants or from substances secreted by sap-sucking insects found on living parts of plants, which they forage for, transform, combine with their own specific substances, deposit, dehydrate, store and allow to mature in the honeycombs of the hive.

SQNZ Honey: Subject to the provisions of Annex I, point 1, of Directive 2001/110/EC, for these specifications, ‘SQNZ Honey’ means honey produced in accordance with good manufacturing practices in modern (movable-frame) hives of vertical design, **extracted by centrifugation from uncapped combs containing no brood**, which has a **water content** suitable for ensuring long-term natural preservation and preventing fermentation, **which has not undergone any heat treatments** designed to prolong its shelf life in liquid form and, in particular, **has never been heated to a temperature exceeding 40 °C**, and which is stored in such a way as to preserve the compositional and organoleptic characteristics inherent to its natural origin and the specific production procedures followed.

SQNZ single-flower honey: SQN honey is classified as single-flower if it derives predominantly from a single floral or plant source and possesses the organoleptic, physico-chemical and microscopic characteristics of that source, in accordance with the characterisation sheets for single-flower honeys.

SQNZ wildflower honey: SQN honey *may also be defined* as ‘wildflower’ if it comes from multiple floral or plant sources and for which a precise botanical origin (flowers/nectar or honeydew) cannot be identified. A product resulting from the blending of different monofloral honeys cannot be classified as ‘wildflower’ honey.

SQNZ honeydew honey: honey obtained mainly from substances secreted by sap-sucking insects (*Hemiptera*) found on living parts of plants or from secretions originating from living parts of plants.

The following designations **may not** be used for SQNZ honey

- a) “natural honey”. It should be noted that the annex to the Regulation containing the Combined Nomenclature (both the 2013 and 2019 versions) includes the entry ‘**Natural honey**’, in the same way as EU Regulation 1308/2013: clearly, this designation is not consistent with the current legislation governing the definition of honey and, as such, is not incorporated into these specifications.
- b) ‘honey in comb’, ‘honey with pieces of comb or sections of comb in the honey’, ‘drained honey’, ‘centrifuged honey’, ‘pressed honey’ and ‘filtered honey’, as these are obtained **solely by centrifuging uncapped combs that do not contain brood**.

4. PRODUCT SPECIFICITIES

The specific characteristics of the 'honey' product produced in accordance with these specifications are set out in the requirements detailed below, which go beyond the marketing standards laid down in Regulation (EU) No 1308/2013, as amended, and Regulation (EC) No 589/2008.

Compliance with these requirements enables SQNZ honey to be classified as being of significantly higher quality than similar products marketed within the European Union.

These specifications set out the mandatory requirements for the product's protection, which ensure its specific characteristics.

4.1. Nutritional requirements

This requirement is met by the obligation to include the nutrition table on the label, as specified in paragraph 6.4.1.

The values shown on the label may be those from specific analyses for each batch or average values available via the link to the CREA portal <http://www.alimentinutrizione.it/>.

The aforementioned **nutritional properties of the honey** are guaranteed by compliance with the following rearing and feeding rules:

- a) The artificial feeding of bees consists exclusively of sugar;
- b) Sugars resulting from the hydrolysis of starch contained in syrups derived from maize, wheat, rice, etc., or pollen substitutes are excluded;
- c) Artificial feeding of bees is permitted only where necessary and may be carried out up to 10 days before the honey supers are placed;
- d) Use of clean water for feeding the bees;

4.2. Product quality requirements

To bear the designation 'Certified Quality', the characteristics of the product 'honey' must comply with the following analytical and sensory parameters:

Table 1 – Physico-chemical characteristics of the product SQNZ Certified Quality honey at the time of packaging; additional requirements to those laid down in the regulations in force

ANALYTICAL PARAMETER	Parameter values for Certified Quality Honey	METHOD/ SPECIFICATION
Water content	Max 17.0%	
Residues of individual acaricides in products authorised for the control of Varroa destructor, other than products based on naturally occurring organic acids such as oxalic acid or formic acid, or based on essential oils and aromatic substances such as menthol, thymol, eucalyptol or camphor:	Max 0.020 mg/kg	
Sum of total residues of the above acaricides	Max 0.030 mg/kg	
Hydroxymethylfurfural (HMF) content:	Max 15 mg/kg	Value valid for the manufacturer and packager at the time of bottling
	Max 35 mg/kg	Value applicable to the marketing and/or distribution operator
Organoleptic characteristics:		
⇒ SQNZ honey has organoleptic characteristics consistent with its natural origin and is free from objective defects (impurities, foam, fermentation odour, and foreign substances) .		
⇒ It is presented in the physical state (liquid or crystallised) corresponding to its composition and the season, and resulting from compliance with these production regulations.		
⇒ Single-flower honey products exhibit the organoleptic characteristics typical of their origin.		
Melissopalynological characteristics SQNZ honey has a sediment that complies with		

production standards and is consistent with its botanical and geographical origin. In particular, it contains no signs of fermentation, soot, or elements indicating contamination with brood or substances foreign to the natural composition of honey.		
Characteristics of single-flower honeys Where a product is marketed as a single-flower honey, the producer is required to verify that it meets the identification criteria for the relevant type, including, based on appropriate analyses, before placing it on the market.		

4.3. Requirement for good farming practices

The requirement for good beekeeping practices is met through specific mandatory requirements and several recommendations on

- suitable rearing conditions;
- Feeding in accordance with nutritional requirements;
- Protection against disease;
- Materials used in livestock farming.

4.4. Traceability requirement

The requirement for product traceability and trackability is met by compliance with Regulation (EC) No 178/2002 and Legislative Decree No 190 of 5 April 2006.

In this regard, compliance with this requirement is verified through the individual operator's self-monitoring plan.

5. NATIONAL QUALITY SYSTEM FOR HONEY

5.1. The quality system designation

The wording of the national quality scheme for honey production is: **CERTIFIED QUALITY HONEY**.

The term '*Certified Quality*', recognised in SQNZ honey, is reserved exclusively for products that:

1. Meet the composition requirements and comply with the parameters set out in **Table 1** of these specifications. These parameters must be maintained at the time of packaging and throughout the period indicated by the manufacturer on the product label;

2. Comes from production and processing companies that ensure the traceability of the product and that comply with the general rules set out in these specifications;
3. Is marketed and distributed by companies which, whilst guaranteeing the traceability of the product, comply with the provisions of these specifications.

The wording 'Certified Quality Honey' may be translated into the various languages of the countries to which the product is exported, in addition to the mandatory designations required under current EU and national legislation.

5.2. Area of application

The specific characteristics of the honey guaranteed by these specifications are achieved through

- a) Monitoring of the individual stages of the production process;
- b) Monitoring of health aspects and environmentally sustainable production factors used in beekeeping.

The SQNZ Honey Specification applies to all stages involved in the production, processing and marketing of honey

- a) Beekeeping;
- b) Processing;
- c) Packaging;
- d) Storage;
- e) Marketing.

Honey produced in accordance with these Specifications may be:

1. Single-flower;
2. Wild flower;
3. Honeydew.

5.3. Participation and requirements for supply chain operators

Membership of SQNZ Honey is entirely voluntary.

All supply chain operators, whether individual or members of an association, who comply with the obligations set out in the following chapter and who meet the following requirements may join the SQNZ Honey scheme:

- a) have their registered office and place of business in one of the countries of the European Union;
- b) formally undertake to comply with these Regulations;

- c) declare that they accept and will implement the Control Plan, annexed to the Ministerial Decree recognising the national quality system for honey production.

Individual operators wishing to join the SQNZ Honey scheme must

- a) Appoint an inspection body authorised by the Ministry;
- b) Provide the inspection body with a written declaration confirming that they are aware of the specification and undertake to comply with the rules, obligations and requirements set out in the specification and in this decree;
- c) Manage and keep constantly updated the information necessary to certify the traceability of the product;
- d) **Draw up and sign a self-monitoring plan**, which the designated supervisory body must approve;
- e) Carry out and document the self-monitoring activities referred to in the previous point;
- f) Ensure the product is correctly labelled in accordance with statutory requirements and the provisions of the specification;
- g) To retain the documentation and records required by the specifications for a minimum period of twenty-four months, subject to any longer retention periods provided for by the regulations in force;
- h) Allow the control bodies and the competent supervisory authorities access to the company's premises and documentation at any time and without restriction;
- i) Be able to demonstrate ongoing compliance with all the requirements set out in the SQNZ.

Member operators wishing to join the SQNZ Honey scheme must

- a) Establish an internal control system, which must be approved by the designated control body, implemented through periodic documentary and/or on-site and/or analytical checks carried out at the premises of participating operators;
- b) Fulfil the obligations of the internal control system, and carry out and document the internal control activities referred to in point (a);
- c) Manage the database of participating operators;
- d) Manage the database of the number of hives kept and the quantities of certified product sold in accordance with the specifications;
- e) Manage the database or records of the quantities of certified product received and sold;
- f) Ensure product traceability at all stages of the production process.

6. PROCESS STAGES AND OBLIGATIONS FOR OPERATORS

The honey production chain comprises the following operators

- a) Production businesses (beekeepers);
- b) Processing businesses (packaging, preservation, etc.);
- c) Commercial operators.

The key stages in the processing and management of honey throughout the beekeeping supply chain are identified as follows

- a) Breeding;
- b) Processing:
 - i. Honey super removal,
 - ii. Dehumidification if required,
 - iii. Honey extraction,
 - iv. Decanting,
 - v. Packaging,
 - vi. Storage;
- c) Marketing.

Operators must comply with the following obligations and requirements at each stage of honey processing and handling.

6.1. Rearing stage

The requirements that operators must comply with during the rearing phase are

- a) Registration in the BDN's Beekeeping Register section, as 'production for commercial purposes/professional beekeeper'; for operators who do not have their registered office in Italy, membership of a similar body that certifies their registration and the identification of their apiaries;
- b) Annual registration of hives in the BDN and updating of data in the BDN (movements, opening/closing of apiaries, etc.) or compliance with the corresponding national regulations for beekeepers who do not have their registered office in Italy;
- c) Display of the unique farm identification code at the apiary;
- d) Appropriate staff training.

Furthermore, all beekeepers who are members of SQNZ Honey must, in accordance with

Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs, notify the competent authority, for registration, of all production, processing, transport, storage and sale activities carried out by them, and keep the following records:

- i. Processing register, which must be certified by the competent local Veterinary Service;
- ii. Record of feed administered to bees;
- iii. Record of analyses carried out;

To verify that the hives are being managed correctly, the documentary evidence, where available, of the application of the good beekeeping practices described below must be assessed. These consist of a series of operational and management measures and decisions aimed at the appropriate management of apiaries, which promotes the strengthening of hive health, better prevention of bee diseases and, consequently, a general improvement in the quality of production.

6.1.1. Choice of bees

The following procedures and requirements are subject to certification

- 1) Bees must belong to breeds and/or genetic subtypes of the species *Apis mellifera*;
- 2) Each hive must consist of a colony of bees and, at the time of honey harvest, contain at least 6 combs in the nest;
- 3) Internal (on-farm) replacement is permitted to preserve the characteristics of the colonies already present in the area.

6.1.2. Location of the apiary

The following procedures and requirements are subject to certification

- 1) Production apiaries may be
 - a. Resident, if the location is fixed for the entire production season;
 - b. Nomadic, if the location varies during the production season.
- 2) Apiaries must be sited in accordance with the minimum distances set out in the national rules in force in the Member State in which they are located.
- 3) Nomadic bee-keeping must be carried out in compliance with the specific regional/national provisions in force in the region/Member State in which the apiaries are located.

- 4) Apiaries are situated in areas with an adequate supply of nectar and pollen sources. They are located at a sufficient distance from sources that could potentially contaminate the honey or be harmful to the health of the bees. If the survival of the bee colony is threatened, it may be moved to areas that do not comply with these provisions regarding the location of the apiary and/or emergency feeding may be provided in accordance with section 6.1.5.
- 5) During the autumn and winter months, hives must be positioned at least 10 cm above the ground to protect them from ground damp.

6.1.3. Characteristics of beehives (materials)

The following procedures and requirements are subject to certification

- 1) The use of modern hives with removable frames and an inspectable Varroa-proof bottom board fitted with a mesh is mandatory;
- 2) Hives, including super boxes and frames, must be made of wood;
- 3) The use of paints of any origin or type to coat the interior parts of the hive is prohibited;
- 4) The hive may only be coated on the outside, using non-toxic paints and dyes with a low content of lead and other heavy metals;
- 5) The sheets used to construct the honeycombs must be made of beeswax that has undergone heat treatment sufficient to reduce the microbial load significantly.

6.1.4. Running the hive

The following procedures and requirements are subject to certification

- 1) Harvesting is carried out exclusively from broodless honeycomb frames. At the time the honey supers are placed, the honey supers must never have contained any brood.
- 2) During the inspection of the hives, the necessary smoke is produced using plant-based materials of a cellulosic nature, which do not transfer foreign odours or combustion residues to the honey; in particular, the material used must not contain proteins, oils or fats, resins or waxes.
- 3) When the honey supers are removed, the bees are driven away using a method that preserves the quality of the product (such as a bee escape or a blower); the use of repellents or excessive smoke is prohibited, and in any case, the provisions set out in point 5 must be observed.
- 4) The use of devices designed to prevent the queen from laying eggs in the super

frames (queen excluders) is mandatory.

- 5) Super frames must be stored in dry premises that comply with current health and hygiene regulations, and fitted with devices designed to capture, prevent the entry of, and deter the nesting of animals (nets, grilles, traps, etc.).
- 6) Reused hives must be cleaned and disinfected before a new colony is introduced. For these operations, physical treatments such as steam or direct flame, or disinfectant solutions, are permitted.
- 7) Where necessary, the comb wax must be replaced with only beeswax that has undergone heat treatment sufficient to reduce the microbial load significantly.
- 8) If the processing and treatment of the wax is carried out by a third party, the operator who carried out the operation or the retailer of the wax foundation must provide the beekeeper with a declaration stating the heat treatment (temperature and duration) to which the wax has been subjected, such as to ensure a significant reduction in microbial contamination.
- 9) In addition to the traditional method of replacing the comb in the hive with sheets of sterilised beeswax, as described in the previous point, the use of natural comb from the hive is permitted, allowing the bees to build it themselves.

6.1.5. Nutrition

The following procedures and requirements are subject to certification

- 1) **Emergency feeding is permitted** in the event of particularly unfavourable seasonal conditions¹ and must be suspended at least 10 days before the honey supers are placed. Any form of feeding is strictly prohibited during the honey flow whilst honey supers are in place.
- 2) For feeding, only honeycombs, home-produced honey and pollen, or sugary substances may be used; the use of protein-based feed is prohibited, except home-produced pollen.

6.1.6. Health protection

The following procedures and requirements are subject to certification

¹ See Article 5, paragraph 10 of Ministerial Decree 229791 of 20 May 2022. Pursuant to Annex II, Part II, point 1.9.6.2(b) of the Regulation, adverse weather conditions that may threaten the survival of a bee colony are those which, by way of example, may cause the situations listed below

- a) Insufficient food availability, understood collectively as both 'stocks' and 'foraging sources', namely nectar, pollen and honeydew;
- b) Risk of the spread of infectious conditions.

- 1) The use of antibiotics and sulphonamides is prohibited in the health management of beehives.
- 2) In cases of infestation by *Varroa destructor*, only authorised veterinary medicines may be used, based on naturally occurring organic acids such as oxalic or formic acid, or on essential oils and aromatic substances such as menthol, thymol, eucalyptol or camphor.
- 3) Where, for the purpose of managing the infestation, it is necessary to use authorised veterinary medicinal products that are chemically different from those specified in point 2), the characteristics of the honey from the treated apiaries must comply with the chemical and physical limits set out in the table referred to in point 4.2.
- 4) For the control of wax moths (*Galleria mellonella* and *Achroia grisella*), only the use of *Bacillus thuringiensis*, acetic acid and the cold chain is permitted.

6.1.7. Good beekeeping practices in hive management

To ensure optimal rearing conditions and avoid excessive heat stress, it is essential that

- 1) Hive sites, whether stationary or migratory, must have access to water year-round. Where there are no natural sources of water, the beekeeper must ensure that the hives have an adequate supply of water via drinking troughs, containers, etc.
- 2) During the summer months, where temperatures exceed 40 degrees, the hives are adequately protected from direct sunlight through insulation or painting of the hive roofs, the use of shade cloths, or by positioning them in the shade;
- 3) All movements must be carried out exclusively using hives that ensure adequate ventilation for the bees, via ventilation flaps and/or bases and/or frames with ventilation mesh;
- 4) Hives must be moved early in the morning or late in the evening, ensuring that all foraging bees have returned, and using vehicles that ensure optimal ventilation.

6.2. Processing stage: removal of honey supers – local – extraction of the product

All processing operations, from the removal of the honey supers to the bottling of the honey, must be carried out in dry premises that comply with current health and hygiene regulations and in accordance with the requirements of the self-monitoring plan.

The premises used for honey processing must be suitably equipped with the monitoring equipment set out below (thermometers, hygrometers, etc.).

- 1) The honey supers may be removed when the honey is considered to be mature based on **one of the following parameters**:
 - a. Water content < 18%;
 - a. Capped on both sides of the comb > 50 %.
- 2) The following environmental parameters must be maintained in premises used for honey **extraction** and processing:
 - a. Relative humidity must be below 60%;
 - b. The temperature must never exceed 40 °C.
- 3) Immediately after harvesting, the honey supers must be transported to prevent contamination (including dust, dirt, contact with insects or other animals, or foreign substances) and the absorption of moisture from the air by the honey.
- 4) If the honey still in the honey supers has a water content between 17 and 20%, the honeycombs or the extracted honey may be treated with a stream of hot, dry air and/or a dehumidifier to reduce the water content to $\leq$ 17%.
- 5) If the method used to reduce the water content of the product involves heating the air to above 25°C, the treatment temperature must not exceed 35°C and the duration of the heating process must not exceed 72 hours.
- 6) Extraction from the honeycombs is carried out exclusively using **centrifugal honey extractors**.
- 7) Honey from the caps can be extracted manually or using mechanical methods, such as draining, centrifuging or pressing. **The use of other systems, such as screw-type cap extractors or melters, is not permitted.**
- 8) The honey is adequately purified by decanting and/or using a bag filter with a pore size of between 100 and 500 microns.
- 9) The purified honey is placed in food-grade stainless steel containers fitted with airtight lids for subsequent wholesale or retail sale.
- 10) **The pasteurisation and sterilisation of honey are prohibited.**
- 11) Heat treatment must be limited to the strictly necessary time, and the product temperature must never exceed 40 °C.

6.3. Preservation and storage

The high natural sugar content in honey prevents bacterial growth and spoilage.

Thanks to its natural antibacterial properties, honey has a long shelf life, provided certain precautions are taken to prevent spoilage.

Potential spoilage is caused by humidity, light and temperature.

To ensure optimal preservation in the medium and long term, the following requirements must be observed:

- 1) During processing in the laboratory, to prevent the absorption of moisture and foreign odours from the environment, it must be kept in a cool, dry place, as moisture promotes fermentation.
- 2) Honey intended for wholesale sale must be placed in airtight containers made of food-grade material (glass, stainless steel, food-grade plastic, etc.).
- 3) For retail sale, only glass containers are permitted. For packs weighing less than 400 g, all food-grade materials are permitted.
- 4) The finished product must be stored, including whilst on the shop shelves, in dry premises, away from direct sunlight and at temperatures not exceeding 25 °C.
- 5) Between extraction and bottling for retail sale, only those processing operations are permitted which do not alter the compositional characteristics of the honey and which do not slow down the natural progression of the crystallisation processes.
- 6) Processes carried out at temperatures above 25°C (extraction, decanting, filtration, transfer, blending, controlled crystallisation, bottling) **are limited to what is strictly necessary** to minimise changes to the product.
- 7) During the processing operations carried out to prepare the honey for the market, the honey mass is not kept at temperatures between 32 and 38 °C for more than 7 days, nor at temperatures between 38 and 40 °C for more than 72 hours. The average temperature of the honey must never exceed 40°C.

6.4. Marketing stage

SQNZ-certified honey is presented to the end consumer in glass jars with **airtight lids and a tamper-evident seal**.

For packs weighing less than 400 g only, **other forms of packaging** are permitted provided they offer the same level of assurance regarding the preservation of the product's compositional and organoleptic characteristics.

6.4.1. Supplementary labelling information

In addition to the information required by current legislation, the following details must appear on the label

- a) Best stored at a temperature below 20°C, in a dry place and protected from light;
- b) SQNZ logo;
- c) Nutritional table in accordance with EU Regulation 1169/2011;
- d) Mandatory batch number, which cannot be replaced by the minimum storage life (MSL);
- e) TMC to be indicated using the words '*best before*'.

The information to be included on the label and the manner in which the product is presented in public establishments must comply with current national and EU legislation; in particular:

- Legislative Decree No. 179 of 21 May 2004 – Implementation of Directive 2001/110/EC on the production and marketing of honey.
- Directive (EU) 2024/1438 of the European Parliament and of the Council of 14 May 2024 amending Council Directive 2001/110/EC on honey,
- Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods, and Commission Regulation (EU) No 432/2012 of 16 May 2012 establishing a list of permitted health claims made on foods.
- Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers (Article 13).

Table 2 – Supplementary labelling information

What to do	Frequency	Documentation	Responsible person	Control Number Management	Certification.
State the storage instructions (Store preferably at a temperature below 20°C in a dry place away from light.)	For each batch	Label	Packager	As per the Control Plan	
Include the SQNZ logo	For each batch	Label	Packager	As per the Control Plan	
Insert the nutrition table in accordance with EU Regulation 1169/2011	For each batch	Label	Packager	As per the Control Plan	
Mandatory indication of the batch number, which cannot be replaced by the best before dates (BBD)	For each batch	Label	Packager	As per the Control Plan	

7. GENERAL RULES

7.1. Prerequisites

Operators wishing to participate in the production chain for ‘Certified Quality Honey – SQNZ’ must submit a formal **declaration of commitment** to comply with these specifications; in particular, they must

- a) Guarantee the origin of the product;
- b) Use raw materials sourced from hives managed using techniques in accordance with the guidelines set out in these specifications;
- c) Adopt product management techniques designed to ensure the product meets the compliance requirements as set out in these specifications;
- d) Accept, within their area of responsibility, checks carried out by their Organisation and inspections by the Control Body;
- e) Comply with the requirements of the decree recognising the National Quality System for Beekeeping.

7.2. Records – Traceability

The following activities are subject to documentary verification:

- 1) The beekeeper is required to retain purchase documents for the products and services purchased, in particular:
 - a) The traceability of products and services purchased and used in production activities, through the systematic retention of purchase documents (receipts, invoices, etc.) and the correct completion of **the register of medicines and the register of feed administered**.
 - b) Wax sheets (specifying the heat treatments carried out for sterilisation);
 - c) Cleaning agents and disinfectants.
- 2) Beekeepers **must record** in the BDN – or a similar system for countries other than Italy – all the information required by current legislation concerning production activities. They must also keep records in specific registers
 - a) Date of installation and removal of frames and related number (per station);
 - b) Wax sterilisation treatments (date of execution);
 - c) Disinfection measures carried out on hives (dates of implementation, products used);
 - d) artificial feeding interventions (date of execution, products used, quantity of product);
- 3) The operator must record the following information regarding the processing, packaging and storage of the product

- a) Date of honey extraction, quantity and type of honey obtained (by Domogeneous batch);
- b) Date of packaging, quantity of honey packaged, number and type of packaging used;
- c) Management of cleaning, disinfestation, disinfection and deratting of premises;
- d) Training of staff.

All documentation (receipts, invoices, analysis certificates, etc.) and records required by these specifications must be retained for a minimum period of 5 years, subject to any longer retention periods required by other legislation.

The logs provided for by these regulations may be in hard copy and/or electronic format.

7.3. Management of production quantities

The following procedures and requirements are subject to certification

Table 3 – Management of production quantities

What to do	Frequency	Documentation	Responsible person	N.C. Management	Certification
Product quantity consistent with production capacity	Annually		Manufacturer/legal representative	As per the Control Plan	§
Honey yield is consistent with the apiaries	Annually		Processor/Legal representative	As per the Control Plan	§
Honey produced and certified honey	Annually		Processor/Legal representative	As per the Control Plan	§

7.4. wrapping

The following procedures and requirements are subject to certification

Table 4 – Packaging

What to do	Frequency	Documentation	Responsible person	Control Number Management	Certification
Primary packaging that protects against light and is impermeable to	For each pack of honey	Visual and documentary inspection	Packager	As per the Control Plan	§

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7.5. Storage of packaged honey

The following procedures and requirements are subject to certification

Schedule 5 – Storage, handling and sale of bottled honey

What to do	Frequency	Documentation	Responsible person	Control Number Management	Certification
Secondary packaging bearing the words 'PROTECT FROM LIGHT AND HEAT'	For each secondary package	Visual	Packager	As per the Control Plan	§

7.6. Distribution

It is recommended that you

- Check that the remaining shelf life of the product on delivery is not less than two-thirds of the minimum shelf life stated on the label;
- Comply with the principle that subsequent deliveries must have subsequent expiry dates;
- Keep the product away from direct light;
- Repeat clearly on the outer packaging as well: **KEEP AWAY FROM LIGHT AND SOURCES OF HEAT.**

7.7. Transport

It is recommended that you

- use equipment in a hygienic condition;
- avoid leaving the product in direct sunlight for more than 12 hours;
- Take breaks in the shade during the hottest months.

7.8. Display at the point of sale

It is recommended that you

- avoid exposing the product to direct light;

- b) Keep the temperature in the sales area below 25 °C.

8. CONTROL MEASURES

8.1. Self-testing

- 1) The bee-keeper must apply a self-supervision programme based on the requirements provided for herein.
- 2) The inspection body shall verify the existence, adequacy and use of the self-inspection plan.
- 3) The control bodies authorised to certify the SQNZ Honey product are those specified in the Ministerial Decree recognising the quality system. ... (Ministerial Decree of 16 December 2022). A certification agreement is drawn up between the inspection bodies and the applicant seeking accreditation under the SQNZ Honey scheme.
- 4) The inspection body must
 - ⇒ enter into a contractual agreement with the party requesting the use of the wording provided by SQNZ Honey for certification activities;
 - ⇒ Carry out the *annual certification/surveillance* activities in accordance with these specifications and the associated certification regulations, as well as with the control plan set out in the Ministerial Decree recognising SQNZ Honey.
- 5) All provisions of these specifications, as well as all obligations arising from the applicable legislation on beekeeping, veterinary treatments, food hygiene and safety, and the labelling and presentation of food products, are subject to inspection.