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Textiles — Animal welfare in the supply chain — General requirements for the production, preparation and traceability of Angora rabbit fibre, including ethical claims and supporting information

Textiles — Bien-être animal dans la filière — Exigences générales pour la production, la préparation et la traçabilité de la fibre de lapin angora, y compris les déclarations éthiques et les informations justificatives

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 38, *Textiles*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 248, *Textiles,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The World Organization for Animal Wealth, Terrestrial Animal Health Code (OIE TAHC) defines animal welfare as "*how an animal coping with the conditions in which it lives and dies. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing. Animal welfare refers to the state of the animal; the treatment that an animal receives is covered by other terms such as animal care, animal husbandry, and humane treatment*".

The domestic rabbit is a mammal pertaining to the Lagomorph order (with four incisors in the upper jaw). In particular, Angora rabbits come from Turkey (Ankara) and have always been prized for the production of quality animal fibre on a par with the Cashmere and Angora goat (mohair) and that of the South American camelids (Vigogna and Alpaca).

The production of animal fibre from Angora rabbits is an animal husbandry activity that is only practiced in certain parts of the world. The main producer of Angora rabbits today is China. These rabbits have the capacity to produce the very soft, warm fibre of a brilliant white colour known as: Angora. Rabbit pelts are double-coated, i.e. comprising a double layer of coarse fibres deriving from the primary hair follicles (guard hairs, which usually grow in groups of 3) and very soft underlying fibres that come from the secondary follicles (undercoat, located in proximity to the 3 primary follicles).

The Angora rabbit produces around 1 kg to 1,5 kg a year of fibre, or almost 30 % of its own live weight. The productive cycle of the rabbit lasts for around 3 to 4 years. Angora rabbit hair grows according to the classic model of follicular activity, which is divided into 3 main phases: the "anagen" or the full follicular activity phase, characterized by fibre growth; fibre the "catagen" or the phase of follicle regression and interruption of fibre growth; fibre and finally the "telogen" or follicle resting phase, characterized by fibre shedding fibre. For these reasons, Angora fibre is usually collected at regular intervals through combing or shearing. Said activities are greatly affected by the type of rabbit bred, how the business is managed, and obviously the nutritional conditions of the animals.

This document reflects national and international best practices in terms of animal welfare with specific reference to rabbit breeding and in particular to:

— production standards;

— animal housing conditions;

— transformation;

— packaging;

— transport;

— storage;

— ethical claims and supporting information;

— traceability;

— checks and inspections.

This document is aligned with the European Convention for the protection of animals kept for farming purposes and Directive 98/58/EC, concerning the protection of animals kept for farming purposes[11] and is based on five freedoms for the protection of animal welfare (see Table 1).

Textiles — Animal welfare in the supply chain — General requirements for the production, preparation and traceability of Angora rabbit fibre, including ethical claims and supporting information

1 Scope

This document specifies requirements for the management of farmed Angora rabbits in accordance with animal welfare principles.

This document applies to the management and control of critical activities in Angora rabbit farming, including accommodation, reproduction, feed and nutrients, health, fibre collection, ethical claims and supporting information.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/TS 17033:2019, *Ethical claims and supporting information — Principles and requirements*

ISO 26000, *Guidance on social responsibility*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
animal welfare
well-being of animals in the ethical conditions in which they are farmed

3.2
competent authority
veterinary authority or other governmental authority of a country having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the OIE TAHC

[SOURCE: ISO/TS 34700:2016, 3.7]

3.3
kit
baby rabbit from birth to weaning

Note 1 to entry: Rabbit aged from birth to 49 days.

3.4
young rabbit
rabbit that has not reached sexual maturity

Note 1 to entry: Rabbit aged after weaning to the adult age.

3.5
adult rabbit
rabbit that has reached sexual maturity

Note 1 to entry: Rabbit older than 6 months.

3.6
brood
group of kits from one female rabbit

4 Requirements

For all aspects of social and environmental responsibility not specifically addressed in this document, ISO 26000 shall be referred to.

This document defines requirements for the management of farmed Angora rabbits in accordance with animal welfare principles expressed in terms of five freedoms, to be ensured according to the areas of intervention expressed in Table 1.

NOTE This document is also aligned with European legislation on the welfare of farmed animals[11].

Table 1 — Five (5) animal freedoms

The 5 freedoms	Areas of intervention
Freedom from hunger, thirst and malnutrition	Feeding and watering
Freedom from physical and thermal discomfort	Animal housing conditions and farming practices
Freedom from injury and disease	Health management
Freedom to express normal species-specific behavioural patterns	Animal housing conditions and farming practices
Freedom from fear and stress	Animal housing conditions and farming practices Fibre management

5 Animal housing conditions and farming practices

5.1 Structures

The premises of breeding establishments where the rabbits are farmed shall be fully fenced in order to control the entrance of people, vehicles and unwanted animals that can compromise the health and wellbeing of the animals.

The spaces where the animals are farmed shall be subdivided into the following areas: breeding areas, adult breeding females (does), fattening males (bucks) (if present).

The structures housing the Angora rabbits shall be built to ensure their protection and guarantee the best conditions for the wellbeing of the farmed animals.

The structures shall be walled or enclosed in a manner that ensures a controlled internal environment (temperature, humidity, lighting, ventilation, etc.) that reflects as far as possible the physiological and ethological needs of the rabbit.

If possible, the structures shall be positioned in a tranquil area, in the shade, with no extreme changes in temperature, and with good air quality and ventilation.

All of the internal surface areas of the structures in which the animals are housed shall be made from suitable materials that are easy to clean and disinfect to reduce to a minimum the risk of disease.

All of the equipment, installations and tools present in the spaces where the animals are kept shall be installed and managed so as to ensure that they function properly and can be easily inspected, cleaned and disinfected in order to reduce the risk of disease and any negative impact on animal welfare.

All of the equipment, installations and tools shall be used and maintained in accordance with the relative instruction manuals.

All automatic equipment or other mechanical tools on which the welfare of the rabbits depends shall be thoroughly checked at least once a day. Any faults found shall be fixed immediately or, if this is not possible, specific measures to safeguard the health and wellbeing of the rabbits shall be put in place until the faults are fixed.

All of the openings to the enclosures where the animals are kept shall be equipped with mechanisms to prevent the entrance of unwanted animals or predators.

5.2 Animal housing systems

5.2.1 General

The barn method of farming Angora rabbits is impractical since, in addition to an increased risk of health issues, the uniquely developed hair of these animals can pick up various elements from the ground, forming knots with consequent skin injuries and preventing certain physiological functions such as urination and defecation; this process would ultimately compromise the wellbeing of the animal and the quality of the product.

For these reasons, the animals shall be housed in structures that promote good health, limit the risk of disease, injury or infection and ensure adequate living space that allows locomotion:

— standing up, lying down and turning around freely;

— fully stretching their legs;

— moving by hops;

— lying down in a “relaxed” position with the hind legs stretched out; and

— social species-specific behaviours, such as especially:

    — cleaning themselves;

    — hiding;

    — gnawing;

    — social interactions (where feasible);

    — holding themselves up with their ears erect (a “look-out” stance typical of the species).

5.2.2 Characteristics and materials

Rabbits should be kept in cages or preferably in pens (elevated or at floor level). These may be indoor or outdoor pens. In the case of outdoor pens, there shall be a roof to protect the rabbits from other animals and to stop them escaping. The animal housing structures shall:

— be made from comfortable material that does not cause any discomfort, harm, suffering or trauma, with no sharp edges or protrusions;

— have a floor made of rigid, flat, stable and not slippery material;

— have good drainage to ensure the removal of animal waste or any water leaks;

— let in adequate light, allow the animals to see each other, and be easy to clean and disinfect.

Rabbits should have access to an area with well-tended litter. Furthermore, an elevated platform (see 5.2.3) shall be installed occupying at least 30 % of the cage.

It shall be possible to make nests in the structures where pregnant animals are housed. These structures shall also be made from material that can be washed and disinfected (metal or plastic) and easily inspected. Moreover, the pregnant brood does shall be provided with suitable and sufficient material with which to build a nest (for example, straw, wood chips or other natural materials).

The animal housing structures shall be serviced by feeding and watering systems that are designed, positioned and managed to ensure the provision of sufficient quantities of food and water in all conditions. Said systems shall also be controllable and easily cleaned and disinfected. In addition, any loss, microbial contamination, or risk of causing injury to the animals shall be kept to a minimum.

The housing structures shall also contain devices that enhance the environment by allowing the animals to express their natural species-specific behaviours (see 5.2.4).

5.2.3 Size and density of the animal housing structures

Rabbits being gregarious animals shall be kept in stable groups in relation to the age and stage of development.

Density is a fundamental factor in animal welfare in the prevention of aggressive behaviours and the spread of disease on the farm (see Table 2).

The size of the animal housing structures depends on the animal category: adult and breeding animals, brood does with kits and rabbits weighing less than 1,5 kg reared in groups.

Table 2 — Animal housing structures

Adult females (does) and breeding rabbits that produce fibre	Width ≥60 cm, length ≥70 cm and height ≥60 cm. Each individual animal shall have an area of at least 4 200 cm^2 available to them in addition to a platform of 1 800 cm^2 (corresponding to 30 % of the usable floor area), amounting to a total of 6 000 cm^2. The platform shall be positioned at a minimum height of 30 cm.
Brood does with kits	Width ≥60 cm, length ≥70 cm and height ≥60 cm. Each individual animal shall have an area of at least 4 200 cm^2 available to them in addition to a platform of 1 800 cm^2 (corresponding to 30 % of the usable floor area), amounting to a total of 6 000 cm^2. The platform shall be positioned at a minimum height of 30 cm. In addition, a nest with the following minimum dimensions shall be present: between 1 000 cm^2 and 1 400 cm^2. This nest shall be darkened, at least receiving less light than the rest of the pen/cage through the walls and the lid. The cages in which the brood does are kept shall have a space reserved for the nest or an isolated nesting area provided at least three days prior to the date on which the does are expected to give birth, so that they can build a nest.
Rabbits weighing less than 1,5 kg reared in groups	A minimum surface area of 1 000 cm^2, better still, of 1 500 cm^2 shall be available to each individual animal.

5.2.4 Equipment promoting species-specific behaviours

Gnawing materials suitable for all production categories (breeding rabbits and growing rabbits) shall be supplied (compressed fodder, wooden block, etc.). Besides the gnawing materials, forage (hay) also shall be daily supplied (see 6.2.3).

Hiding places without dead-end shall be supplied to allow the rabbits to hide like in burrows (e.g. concrete tube).

5.3 Adequate management of the farming conditions

5.3.1 General

The structures shall ensure optimum conditions of temperature, relative air humidity, ventilation and lighting.

5.3.2 Temperature and relative air humidity

The structures shall possess temperature control systems that make it possible to maintain the temperature between 10 °C and 25 °C (optimum temperature from 15 °C to 20 °C) and the relative humidity level between 50 % and 80 % (optimum relative humidity 65 %).

The farmer is required to keep a daily record for each shed of the ambient temperature and the relative humidity in the morning and in the afternoon. Provision shall also be made for measures to be adopted in the event of any malfunction of the equipment in order to ensure these physical parameters are maintained.

5.3.3 Ventilation

The structures shall be equipped with an adequate ventilation system that makes it possible to maintain a comfortable and healthy environment for the animals, preventing any excessive heat rises, removing any harmful gases and dust and reducing humidity levels.

The ventilation inside the animal housing structures shall be at least in accordance with Table 3:

Table 3 — Ventilation

Category	Natural ventilation (m^3/animal)	Forced ventilation (m^3/animal)
Lactating brood does	3,5	3
Brood does	3	2,75
Bucks	2,75	2,5
Weaned animals	0,35	0,30
Source: See Reference [12].		

Good ventilation shall ensure a low concentration of harmful emissions (due mainly to animal waste) in accordance with Table 4.

Table 4 — Air quality

CO_2	NH_3	Dust
<0,15 %	<20 mg/kg	<5 mg/m^3

Excessive concentrations of NH_3 and dust can affect the wellbeing of the animal and lead to respiratory diseases or damage to the mucus membranes.