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**Tekstilje - Dobrobit živali v dobavni verigi - Splošne zahteve za proizvodnjo, pripravo in sledljivost vlaken angorskega kunca, vključno z etičnimi trditvami in podpornimi informacijami (ISO 4465:2022)**

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 (ISO 4465:2022)

Textilien - Tierschutz in der Lieferkette - Generelle Anforderungen an die Erzeugung, die Aufbereitung und Rückverfolgbarkeit von Fasern von Angorakaninchen, einschließlich ethnischer Angaben und unterstützender Informationen (ISO 4465:2022)

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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 (ISO 4465:2022)

**Ta slovenski standard je istoveten z: EN ISO 4465:2022**

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**ICS:**

03.120.20	Certificiranje proizvodov in podjetij. Ugotavljanje skladnosti	Product and company certification. Conformity assessment
59.060.10	Naravna vlakna	Natural fibres

**SIST EN ISO 4465:2022**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN ISO 4465

October 2022

ICS 03.120.20; 59.060.10

English Version

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 (ISO 4465:2022)

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Textilien - Tierschutz in der Lieferkette - Generelle  
Anforderungen an die Erzeugung, die Aufbereitung  
und Rückverfolgbarkeit von Fasern von  
Angorakaninchen, einschließlich ethnischer Angaben  
und unterstützender Informationen (ISO 4465:2022)

This European Standard was approved by CEN on 19 September 2022.

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## European foreword

This document (EN ISO 4465:2022) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with Technical Committee CEN/TC 248 "Textiles and textile products" the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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# INTERNATIONAL STANDARD

**ISO  
4465**

First edition  
2022-09

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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  
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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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](http://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](http://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](http://www.iso.org/members.html).

## Introduction

The World Organization for Animal Health, 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<sup>[1]</sup> and is based on five freedoms for the protection of animal welfare (see [Table 1](#)).