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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 45197-2025

**Technical specification for circulation of fresh edible
mushrooms**

食用菌鲜品流通技术规范

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Table of Contents

Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Harvesting	6
5 Trimming and grading	7
6 Pre-cooling	7
7 Packaging and labeling	7
8 Storage	8
9 Cold chain transportation	9
10 Sales	9
11 Traceability	9
12 Recall	9
13 Verification methods	10
Bibliography	11

Foreword

This document was issued on 24 January 2025 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 August 2025.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

1 Scope

GB/T 45197-2025 specifies the circulation of fresh edible mushrooms from harvest to sale. China grows most of the world's mushrooms, and they are among the most perishable things it ships: a mushroom keeps respiring after picking, browns where it was handled, and loses its market value within a day or two unless it is cooled almost immediately and kept cold. Most of the loss in the chain happens in the first hours, which is why the standard begins where it does. It sets the requirements for harvesting, trimming and grading, pre-cooling, packaging and labelling, storage, cold chain transport, sale, traceability and recall, together with the verification methods for each. It takes effect on 1 August 2025.

This document specifies the requirements for the circulation process of fresh edible

mushrooms, including harvesting, trimming and grading, pre-cooling, packaging and labeling, storage, cold chain transportation, sales, traceability, and recall.

This document applies to the entire circulation process from harvesting to recall of 3 kinds of fresh cultivated edible mushrooms, i.e. oak mushroom, oyster mushroom, and white button mushroom, and 3 kinds of fresh wild edible mushrooms, i.e. king bolete, tricholoma matsutake, and Chinese truffle/Indian truffle. The circulation of other fresh edible mushrooms refers to this document for guidance.

2 Normative references

The following referenced documents are indispensable for the application 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.

GB/T 191 Graphical symbols marking for handling and storage of packages

GB/T 6388 Transport package shipping mark

GB/T 6543 Single and double corrugated boxes for transport packages

GB/T 12728 Terms of edible mushroom

GB/T 23188 Tricholoma matsutake

GB/T 23189 Oyster mushroom

GB/T 23190 White button mushroom

GB/T 23191 King bolete

GB/T 23346 Good distribution practice for food

GB/T 24616 Packaging, labeling, transport and storage for chilled and frozen foods in logistics

GB/T 29373 Traceability requirements for agricultural products - Fruits and vegetables

GB/T 32950 Labeling and marking of fresh and live agricultural products

GB/T 34343 General technical requirement of packaging containers for agricultural products logistics

GB/T 34344 General technical requirement of packaging materials for agricultural

products logistics

GB/T 38581 Oak mushroom

GB/T 38697 Grades and specifications of fresh truffles

GB/T 39907 Dimensions and technical requirements of fruit and vegetable cycling container

GB 43284 Requirements of restricting excessive package - Fresh edible agricultural products

JJF 1070 Rules of metrological testing for net quantity of products in prepackages with fixed content

GH/T 1420 Conservation and promotion technical regulations of wild edible mushroom - *Tricholoma matsutake*

GH/T 1421 Conservation and promotion technical regulations of wild edible mushroom truffle

WB/T 1060 Technical specifications for functions and selection of refrigerating vehicle for transporting food on road

3 Terms and definitions

For the purpose of this document, the terms and definitions defined in GB/T 12728 and GB/T 23346, as well as the following apply.

3.1

cultivated edible mushrooms

Edible mushrooms that produced under conditions of artificial intervention, where all or part of the process from mycelial growth to fruit body development is carried out.

NOTE. Examples include oak mushroom, oyster mushroom, and white button mushroom.

3.2

wild edible mushrooms

Edible mushrooms that complete their entire life cycle autonomously in the natural environment, from spore germination, mycelial growth, primordium differentiation to fruit body (ascocarp or basidiocarp) development.

NOTE. Examples include king bolete, tricholoma matsutake, and Chinese truffle/Indian truffle.

4 Harvesting

4.1 Harvesting of cultivated edible mushrooms

4.1.1 Determine harvesting standards based on market demand and product intended use, and harvest selectively.

4.1.2 Control the frequency and duration of water spraying before harvesting to ensure the moisture content meets the requirements of Table 1.

4.1.3 Harvest by hand or using clean tools. The fruit bodies should be kept intact. After harvesting, promptly remove any remaining culture medium or other impurities from the roots, trim the stipes appropriately, and place them in a clean container. The safety and hygiene requirements for containers shall comply with GB/T 34343.

4.1.4 Handle gently during harvesting, to avoid squeezing or collisions of the mushrooms and minimize mechanical damage.

4.2 Harvesting of wild edible mushrooms

4.2.1 Harvesting should be done in cool, shady conditions, avoiding strong sunlight and high temperatures.

4.2.2 It shall harvest mature mushrooms.

4.2.3 When harvesting king bolete, first remove branches and weeds around the mushroom, hold the base of the stipe with one hand to prevent damage to the mushroom bed, and gently grasp the lower part of the stipe and shake it with the other hand while simultaneously rotating and pulling it upwards, remove soil and other impurities. The harvesting of tricholoma matsutake is carried out in accordance with GH/T 1420, and the harvesting of Chinese truffle/Indian truffle is carried out in accordance with GH/T 1421.

4.2.4 Bamboo baskets, wicker baskets, foam boxes, or special harvesting boxes with soft padding and no contamination should be used as containers to reduce or avoid mechanical damage.