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## Asparagus — Specification and test methods

*Asperges — Spécifications et méthodes d'essai*



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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)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 34, *Food products*, Subcommittee SC 3, *Fruits, vegetables and their derived products*.

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

Asparagus is an ancient crop, native to the eastern Mediterranean and Asia Minor, and first cultivated by the Romans. Popular in sixteenth century France and England, it made its way to America through the colonists. A member of the lily family, it has great nutritional value. It is low in calories and very low in sodium. Asparagus is a particularly good source of vitamin B6, calcium, magnesium, zinc, vitamin A, vitamin C, vitamin E, vitamin K, thiamin, riboflavin, rutin, niacin, folic acid, iron, phosphorus, potassium, copper, manganese, selenium, chromium, dietary fibre and protein. Asparagus spears can be eaten raw or cooked.

Asparagus, *Asparagus officinalis*, is an herbaceous perennial plant in the family Asparagaceae, which is grown for its young shoots, or spears, which are eaten as a vegetable. The asparagus plant is tall with scale-like leaves emerging from the underground stem (rhizome) and has stout stems and feathery foliage. The flowers are bell-shaped and occur alone or in pairs. They are green-white to yellow in colour. After flowering, a round red berry is formed with one to six black seeds. Asparagus can live for 20 or more years and can attain a height of between 100 cm to 150 cm. Asparagus originates from Europe, northern Africa and western Asia.



# Asparagus — Specification and test methods

## 1 Scope

This document specifies requirements and test methods for fresh asparagus shoots of commercial varieties of asparagus grown from *Asparagus officinalis* L., of the Liliaceae family, offered to consumers after preparation and packaging.

This document is applicable to all asparagus except green and violet/green asparagus with a diameter less than 3 mm and white and violet asparagus with a diameter less than 8 mm, packed in uniform bundles or unit packages.

This document does not apply to processed asparagus.

## 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 874, *Fresh fruits and vegetables — Sampling*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 4186, *Asparagus — Guide to storage*

ISO 6882, *Asparagus — Guide to refrigerated transport*

CXC 44-1995, *Code of Practice for Packaging and Transport of Fresh Fruit and Vegetables*

## 3 Terms and definitions

No terms and definitions are listed in this document.

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 <http://www.electropedia.org/>

## 4 Description

Asparagus shoots are subsoil, surface soil suckers and shoots of commercial varieties of asparagus grown from *Asparagus officinalis* L. of the Liliaceae family, to be supplied fresh to the consumer, after preparation and packaging.

## 5 Classification and requirements

### 5.1 General

Asparagus are divided into groups according to their colour (see 5.2.1), divided into classes according to their quality characteristics and diameter (see 5.2.2) and divided into sizes according to their length (see 5.2.3).