



BSI Standards Publication

Dried barberry — Specification and test methods

National foreword

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Foreword

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This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 3, *Fruits and 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.

Introduction

Barberries are found in temperate and subtropical regions around the world. Native species can be found in Europe and North America whereas a greater diversity of species can be found in Africa, Asia and South America. The flowers are either orange or yellow, about 3 mm to 6mm long with both sepals and petals, six each in alternating whirls of three. The fruit is a small berry about 5 mm to 15 mm long, coloured deep red or dark blue. They have waxy surface in either pink or violet and sometimes appear long but are mostly spherical in shape.

Dried barberry — Specification and test methods

1 Scope

This document specifies requirements and test methods for the dried barberry fruit of the *Berberis vulgaris* L. tree.

It is applicable to dried red barberries only.

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 763](#), *Fruit and vegetable products — Determination of ash insoluble in hydrochloric acid*

ISO 1026, *Fruit and vegetable products — Determination of dry matter content by drying under reduced pressure and of water content by azeotropic distillation*

ISO 5520, *Fruits, vegetables and derived products — Determination of alkalinity of total ash and of water-soluble ash*

OECD Scheme for the Application of International Standards for Fruit and Vegetables, 2012

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

3.1

extraneous matter

matter visible to the naked eye that is species waste belonging to the plant to which the product belongs

EXAMPLE Floral waste; crushed stalks and buds.

3.2

foreign matter

matter visible to the naked eye that is not part of the plant to which the product belongs

Note 1 to entry: The origin of macro foreign matter can be non-animal (e.g. stems, stones, straw, visible moulds) or animal (e.g. excreta, insects, insect-defiled product) foreign matter.

3.3

pest infestation

fruit damaged by insect and/or mite infestation

3.4

tailed barberry/cap-stem

piece of wood stuck to end of dried barberry fruit

Table 2 — General requirements

Characteristic	Requirement
Living insects or mites	Free
Extraneous matter	Free
Foreign matter	Mass fraction of 10 g/kg (max.)
Pest infestation	Mass fraction of 10 g/kg(max.)
Tailed barberry/cap-stem	Mass fraction of 30 g/kg (max.)
Immaturity	Mass fraction of 10 g/kg (max.)
Total ash	Mass fraction of 35 g/kg (max.)
Acid insoluble ash	Mass fraction of 8 g/kg (max.)
Moisture content	Mass fraction of 160 g/kg (max.)

5.3 Tolerances

5.3.1 Group tolerances

Extra class can include at most 5 % black barberries in total mass. Class I can include 8 % black barberries in total mass. Class II can include 10 % black barberries in total mass.

5.3.2 Size tolerances

The mass of barberries in the package that does not conform to the limits specified in [Table 1](#) shall be at most 10 %.

6 Sampling

Samples are taken from the lot. Dried barberries with the same type, class, length, packaging and inspection time are considered as a lot. It is important that the laboratory receives a sample that is truly representative and has not been damaged during storage and transportation.

Sampling shall be in accordance with the OECD Scheme for the Application of International Standards for Fruit and Vegetables, 2012.

7 Test methods

7.1 General

The organoleptical and visual inspections, sniffing, tasting, weighing and measuring of the dried barberries should be done upon the request of the customer

If necessary, the analyses given in [7.2](#) to [7.5](#) can also be performed.

7.2 Visual examination

A visual examination involves the inspection of a test portion of dried barberries and the physical separation of the different coloured fruits.

Visually examine samples of dried barberry for conformity with the proportions of physical defects as follows:

- living insects or mites;
- extraneous matter;

- foreign matter;
- pest infestation;
- tailed barberry/cap-stem;
- immaturity.

For these purposes, weigh, to the nearest 0,1 g, a test portion of about 200 g and spread it out on a clean white surface.

7.3 Determination of total ash

The total ash value of the samples shall be determined in accordance with ISO 5520.

7.4 Determination of ash insoluble in hydrochloric acid

The ash insoluble in hydrochloric acid value of the samples shall be determined in accordance with [ISO 763](#).

7.5 Determination of moisture content

The moisture content value of the samples shall be determined in accordance with ISO 1026.

8 Packaging and labelling

8.1 Packaging

The product shall be packaged in clean food-grade packaging materials to protect it from contamination. The packaging materials and process shall not contaminate the product or otherwise affect its technological, nutritional or sensory quality. The net weight of each package should not be less than 50 g and not be more than 10 kg.

8.2 Labelling

The following elements shall be marked or labelled on each container and case:

- a) the name of the material, and the trademark or brand name, if any;
- b) the name and address of the manufacturer or packer;
- c) the batch or code number;
- d) the net mass or gross mass (according to the request of the importing country);
- e) the producing country;
- f) any other marking required by the purchaser, such as year of harvest and date of packing (if known);
- g) the expiry date.

9 Storage and transport

Processing, packaging, storage areas and transport vehicles shall be free from bad odour that could affect the produce.

To prevent spoilage, the product should be kept in stores at 2 °C to 7 °C and 50 % to 60 % RH (relative humidity) for six months, or at -10 °C to 4 °C and 50 % to 60 % RH for one year.

Dried barberries in packages shall be kept in the shade. They shall not be left in the rain or cold or be allowed to freeze. They shall not be loaded and unloaded in these conditions.

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