

Methods of test for

Spices and condiments —

Part 17: Test methods specific to saffron

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Committees responsible for this British Standard

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- Association of Public Analysts
- Consumer Policy Committee of BSI
- Department of Trade and Industry (Laboratory of the Government Chemist)
- Ministry of Agriculture, Fisheries and Food
- Natural Resources Institute
- Seasoning and Spice Association

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National foreword

This Part of BS 4585 has been prepared under the direction of the Agriculture and Food Standards Policy Committee. It is identical with ISO 3632-2:1993 *Saffron* (*Crocus sativus Linnaeus — Part 2: Test methods*, published by the International Organization for Standardization (ISO). Together with BS 6145:1994 it supersedes BS 6145:1981 which is withdrawn.

Cross-references

International standard	Corresponding British Standard
ISO 928:1980	BS 4585 <i>Methods of test for spices and condiments</i> Part 3:1981 <i>Determination of total ash</i> (Identical)
ISO 930:1980	Part 9:1981 <i>Determination of acid-insoluble ash</i> (Identical)
ISO 3632-1:1993	BS 6145:1994 <i>Specification for saffron</i> (Identical)

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Introduction

Since saffron is a costly spice, the general methods of testing spices are not always suitable because they require the use of large test portions. This is why it was decided to include in this part of ISO 3632 the test methods specific to saffron, when it is not possible to use the general standards.

1 Scope

This part of ISO 3632 describes methods suitable for testing the spice saffron, which is obtained from the flowers of the saffron crocus (*Crocus sativus* Linnaeus).

It is applicable to the testing of saffron in either of the following forms:

- in whole filaments as a loose, supple, elastic and hygroscopic mass of filaments, or
- in powder form.

NOTE 1 Specifications for saffron are given in ISO 3632-1.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 3632. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 3632 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 928:1980, *Spices and condiments — Determination of total ash*.

ISO 930:1980, *Spices and condiments — Determination of acid-insoluble ash*.

ISO 3632-1:1993, *Saffron (Crocus sativus Linnaeus) — Part 1: Specification*.

3 Definitions

For the purposes of this part of ISO 3632, the definitions given in ISO 3632-1 and the following definitions apply.

3.1

moisture and volatile matter content

loss of mass determined under the conditions described. It is expressed as a percentage by mass of the sample

3.2

colouring strength

mainly due to its crocine content, it is defined by measurement of the optical density at the maximum, about 440 nm

3.3

bitterness

mainly due to its picrocrocin content, it is defined by measurement of the optical density at the maximum, about 257 nm

3.4

flavour

mainly due to its safranal content, it is defined by measurement of the optical density at the maximum, about 330 nm

4 Preparation of test sample and order of tests

4.1 Minimum mass of test sample

IMPORTANT — In view of the high cost of saffron, the mass of sample received in the laboratories for carrying out the tests is often limited.

The minimum mass of the laboratory sample shall be 10 g ($5 \text{ g} \times 2$) so that it is possible to carry out all the usual analyses in duplicate.

Larger quantities of sample shall be placed at the disposal of the laboratories in case of any dispute, or if additional tests are required (e.g. nitrogen, crude fibre).

4.2 Procedure

4.2.1 Saffron in filaments

Carry out, **in the order indicated**, the tests and analyses according to the scheme given in Table 1.

4.2.2 Saffron in powder form

Carry out, **in the order indicated**, the tests and analyses according to the scheme given in Table 2.

5 Identification test

5.1 General

This preliminary test may make the subsequent chemical analyses unnecessary if it shows that the saffron is not pure.

5.2 Saffron in filaments

5.2.1 Principle

Visual examination with a magnifying glass.

5.2.2 Apparatus

5.2.2.1 Magnifying glass, with a magnification of $\times 10$ max.