
**Dried rosehips — Specification and test
methods**

Cynorhodon séché — Spécifications et méthodes d'essai

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 23391:2006](https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006)

<https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006>



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 23391:2006

<https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006>

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Requirements	2
4.1 Description	2
4.2 Odour and taste	2
4.3 Freedom from insects, moulds, etc.	2
5 Classification.....	2
5.1 General.....	2
5.2 Classes	3
5.2.1 Extra class	3
5.2.2 Class I	3
5.2.3 Class II	3
5.3 Sizing	4
5.4 Tolerances	4
6 Sampling.....	4
7 Test methods.....	4
8 Packing and marking.....	4
8.1 Packing	4
8.2 Marking	5
9 Contaminants	5
10 Hygienic requirements	5
Annex A (normative) Determination of the content of pest-infested and spoiled dried rosehips, immature fruits, extraneous matter and deviations from main colour	6
Annex B (normative) Determination of moisture content	7
Bibliography	10

iTech STANDARD PREVIEW
(standards.iteh.ai)

[ISO 23391:2006](https://standards.iteh.ai/catalog/standards/sist/fcc45113-3c86-4855-a926-a578d51dc428/iso-23391-2006)

<https://standards.iteh.ai/catalog/standards/sist/fcc45113-3c86-4855-a926-a578d51dc428/iso-23391-2006>

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 23391 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 14, *Fresh, dry and dried fruits and vegetables*.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 23391:2006](https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006)

<https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006>

Dried rosehips — Specification and test methods

1 Scope

This International Standard specifies requirements and test methods for dried rosehips obtained from the fruits of the rosehips shrub (*Rosa canina* L.) destined for human consumption.

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.

ISO 6557-2, *Fruits, vegetables and derived products — Determination of ascorbic acid content — Part 2: Routine methods*

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

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

ISO 948, *Spices and condiments — Sampling* [ISO 23391:2006
https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006](https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006)

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

dried rosehips

sun-dried or artificially-dried fruits of the shrub *Rosa canina* L. and other *Rosa* species prepared from sufficiently ripe fruits

3.2

pest-infested dried rosehips

dried rosehips damaged by insect and/or mite infestation

3.3

spoiled rosehips

rosehips damaged by bruises, or darkened in colour, or showing the presence of mushy tissue, visible decomposition caused by bacteria, fungi, visible mould hyphae or any other indications of disease

3.4

immature rosehips

dried rosehips obtained from an unripe rosehips, having poor flavour, hard tissue and undesirable appearance

3.5

gritty

distinct particles in the fruit flesh

**3.6
stem or seeds**

piece of dried rosehips with stem and/or seeds attached

**3.7
fermented rosehips**

piece of dried rosehips damaged by fermentation to the extent that the characteristic appearance and/or flavour is substantially affected

**3.8
extraneous matter**

dirt, pieces of skin, calyx, leaf, peduncle, twigs, bits of wood, soil or any other foreign matter among or on the rosehips

**3.9
mineral impurities**

acid-insoluble ash content which is determined by the method specified in ISO 930

**3.10
moisture content**

loss in mass determined under the operating conditions specified in Annex B

**3.11
ascorbic acid (vitamin C) content**

content of dried rosehips which is determined by the method specified in ISO 6557-2

iTeh STANDARD PREVIEW
(standards.iteh.ai)

4 Requirements

4.1 Description

<https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-57845113-4284-iso-23391-2006>

The stems shall be pulled or cut off and the calyx ends removed. The fruits shall be sound and clean.

4.2 Odour and taste

Rosehips shall have an odour and taste characteristic of the variety. They shall be free from foreign odour and odour traces coming from abnormal fermented rosehips.

4.3 Freedom from insects, moulds, etc.

Rosehips shall be free from living insects, mites or other parasites and moulds, and shall be practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision). When such magnification exceeds $\times 10$, this fact shall be stated in the test report.

5 Classification

5.1 General

Dried rosehips shall be classified on the basis of colour and the presence of defects, extraneous matter and broken pieces, as specified in Table 1. They may also be separated into sizes.

Rosehips are classified into three classes defined in 5.2.1 to 5.2.3.

5.2 Classes

5.2.1 Extra class

Rosehips in this class shall be of superior quality. They shall be characteristic of the variety and/or commercial type. They shall be practically free from defects, provided that these do not affect the general appearance of the product, the quality, or its presentation in the package. Rosehips in this class shall not exceed the allowable percentages for the various defects given in Table 1.

5.2.2 Class I

Rosehips in this class shall be of good quality. They shall be characteristic of the variety and/or commercial type.

The following slight defects are allowed, provided that the dried rosehips retain their essential characteristic as regards general appearance, quality and presentation: skin defect, coloration defects.

5.2.3 Class II

This class includes rosehips which do not qualify for inclusion in the higher classes but which satisfy the requirements specified in Table 1.

The following defects are allowed, provided that the dried rosehips retain their essential characteristics as regards general appearance, quality and presentation: skin defect, coloration defects.

Table 1 — Requirements for dried rosehips in different classes

	Extra class	Class I	Class II
Pest-infested , mass fraction, % (max.)	1	2	3
Spoiled , mass fraction, % (max.)	1	3	4
Immature , mass fraction, % (max.)	1	2	4
Extraneous matter , mass fraction, % (max.)	0,5	1,0	1,5
Mineral impurities , mass fraction, % (max.)	0,6	0,6	0,6
Colour	light and cream with reddish of cut edges	light and cream with reddish of cut edges	light reddish
Deviations from the main colour , mass fraction, % (max.)	2	5	10
Gritty , mass fraction, % (max.)	1	2	3
Proportion of non-whole rosehips , max. number in 100 pieces (%)	0	5	10
Proportion of stem or seeds , max. number in 100 pieces (%)	2	5	7
Fermented rosehips , mass fraction, % (max.)	0,5	1,0	2,0
Moisture content , mass fraction, % (max.)	5,5	5,5	5,5
Ascorbic acid content , mg per 100 g (min.)	200	175	150

5.3 Sizing

Sizing is determined by the diameter of the widest part. The following minimum diameter is required for each class:

- Extra class > 12 mm;
- Class I 6 mm to 12 mm;
- Class II < 6 mm.

The difference between the longest and smallest fruit in any package shall not be greater than 8 mm.

Sizing is therefore compulsory for the Extra class and Class I, but is not required for Class II rosehips.

5.4 Tolerances

Subject to agreement between the interested parties, tolerances with respect to characteristic and size may be allowed in each package (or in each lot for product transported in bulk) for product not satisfying the requirements of the class indicated.

6 Sampling

It is important that the laboratory receive a sample which is truly representative and has not been damaged or changed during transport or storage.

Sampling shall be conducted in accordance with ISO 948.

[ISO 23391:2006](https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006)

<https://standards.iteh.ai/catalog/standards/sist/fcc45113-3e86-4855-a926-a578d51dc428/iso-23391-2006>

7 Test methods

Samples of dried rosehips shall be tested for conformity of the product to the requirements of Table 1 by the test method specified in Annex A.

The mineral impurities (3.9) shall be determined in accordance with ISO 928.

The moisture content (3.10) shall be determined in accordance with Annex B.

The ascorbic acid content (3.11) shall be determined in accordance with ISO 6557-2.

8 Packing and marking

8.1 Packing

Dried rosehips shall be packed in clean, sound and dry containers made of materials which do not affect the product. If wooden boxes are used, they shall be lined with a suitable paper.

For direct consumption, small consumer packages may be used. The quantities packed in such packages are usually 0,5 kg, 1,0 kg or 2,5 kg net mass but, if required, other quantities may be used. A suitable number of such small packages shall be placed in large wooden or cardboard cases.

The size of the packages and the number of small packages packed in a case shall be subject to agreement between the purchaser and vendor. However, the mass of the large containers or cases shall not be more than 25 kg.

8.2 Marking

The container and case shall be marked or labelled with the following particulars:

- a) the name of the product or variety, and the trademark or brand name, if any;
- b) the name and address of the producer or packer;
- c) the code or batch number;
- d) the net mass, or gross mass (according to the request of the importing country);
- e) the class of product;
- f) the producing country;
- g) the expiry date;
- h) any other marking required by the purchaser, such as year of harvest and date of packing (if known)
- i) a reference to this International Standard (optional).

9 Contaminants

The contents of contaminants (heavy metals, pesticide residues, mycotoxins, etc.) of the dried rosehips shall not exceed the maximum limits established by the Codex Alimentarius Commission for this commodity and/or shall comply with relevant food safety legislation in force in the target country:

— iron	15,0 mg/kg max.;
— copper	5,0 mg/kg max.;
— arsenic	0,2 mg/kg max.;
— lead	0,2 mg/kg max.;
— zinc	5,0 mg/kg max.

10 Hygienic requirements

10.1 It is recommended that the dried rosehips be prepared in accordance with the appropriate sections of the Recommended International Code of Practice — General Principles of Food Hygiene ^[1] and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to the product.

10.2 The product

- a) shall be free from microorganisms in amounts which may represent a hazard to health,
- b) shall be free from parasites which may represent a hazard to health, such as
 - 1) total mesophilic aerobic bacteria 1×10^4 (cfu/g) max.,
 - 2) *Escherichia coli* 0 cfu/g max.,
 - 3) mould-yeast 5×10^2 (cfu/g) max.,
 - 4) *Salmonella* 0 cfu per 25 g max.,
 - 5) *Staphylococcus aureus* 0 cfu/g max.