IS 4811 : 2014 (Reaffirmed 2019)

दाल चीनी साबुत — विशिष्टि

(दूसरा पुनरीक्षण)

Cinnamon Whole — Specification

(Second Revision)

ICS 67.220.10

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भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Spices and Condiments Sectional Committee had been approved by the Food and Agriculture Division Council.

Cinnamon (*DALCHINI*), the bark of *Cinnamomum verum* Bercht. & Presl. and *Cinnamomum zeylanicum* Blume, is an important and commonly used spice in the Indian dietary. It is used in the culinary preparation for imparting sweet characteristic flavour. It is also used for preparing indigenous medicines.

Bark of other species, namely, *Cinnamomum burmannii* C.G. Nees ex. Blume. *Cinnamomum aromaticum* C.G. Nees, *Cinnamomum loureirii* C.G. Nees is generally known as cassia. Whereas, the general term cinnamon is often used for this entire group of products, only the bark of *Cinnamomum verum* Bercht. & Presl. and *Cinnamomum zeylanicum* Blume shall be termed as cinnamon.

While formulating this standard, due consideration has been given to the *Food Safety and Standards Act*, 2006 and the Rules and Regulations framed thereunder and *Legal Metrology (Packaged Commodities) Rules*, 2011. However, this standard is subject to restrictions imposed under these Rules, wherever applicable.

This standard was first published in 1968 and then revised in 1992 to update its requirements. In this revision, the requirements have been updated to align with the standards for cinnamon, whole, laid down under the *Food Safety and Standards (Food Products Standards and Food Additives) Regulations*, 2011.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

CINNAMON WHOLE — SPECIFICATION

(Second Revision)

1 SCOPE

- **1.1** This standard prescribes the requirements for cinnamon (*Cinnamomum verum* Bercht. & Presl. and *Cinnamomum zeylanicum* Blume) whole, for use as a spice and in condiments.
- **1.2** This standard does not cover the requirements for cinnamon powder.

2 REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	Title
1070:1992	Reagent grade water — Specification (third revision)
1797 : 1985	Methods of test for spices and condiments (second revision)
5887 (Part 3): 1999/ISO 6579: 1993	Methods for detection of bacteria responsible for food poisoning: Part 3 General guidance on methods for the detection of <i>salmonella</i> (<i>second revision</i>)
13145 : 2013	Spices and condiments — Methods of sampling (second revision)

3 TERMINOLOGY

- **3.1 Quills** The dried long compound rolls of inner bark of cinnamon up to 1 m length.
- **3.2 Quillings** The broken tubes and splits left after the preparation of quills.

3.3 Chips — The bark (scrapped or unscrapped) obtained from thick branches and stems.

4 GRADES

4.1 The cinnamon bark shall have four grades. The designations of the grades and their requirements are given in Table 1 (*see also* Fig. 1).

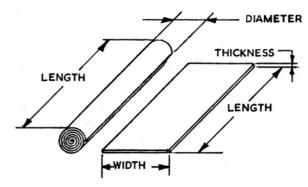


Fig. 1 Measurements of Quills

5 REQUIREMENTS

5.1 Description

The cinnamon, whole shall consist of dried tubes or pieces of inner bark of branches and of young shoots from *Cinnamomum verum* Bercht. & Presl. or *Cinnamomum zeylanicum* Blume. The thickness of bark shall range from 0.1 to 0.3 cm.

5.2 Flavour or Taste and Aroma

Cinnamon, whole, shall have fresh aroma, and delicate and sweet flavour characteristic of the spice. The material shall be free from foreign odour including mustiness.

5.3 Freedom from Moulds, Insects, Etc

The cinnamon, whole, shall be free from living insects

Table 1 Grade Designation of Cinnamon, Whole and Their Requirements (*Clause* 4.1)

Grade Designation	Length	Diameter	Colour	Texture
(1)	(2)	(3)	(4)	(5)
Quills fine	Up to 1 m	Not more than 10 mm	Brownish yellow	Brittle and smooth
Quills average	Up to 1 m	Not more than 20 mm	Slightly reddish	Brittle and smooth
Quillings	Pieces of quills less than 1 m	Not more than 30 mm	Pale brown to reddish	Brittle and smooth
Chips	10 to 30 cm	_	Pale brown to reddish	Brittle

IS 4811: 2014

and moulds and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision), with the aid of magnification (not exceeding $10 \, \text{X}$). The insect damaged matter shall not exceed $1.0 \, \text{percent} \, (m/m)$.

5.4 Extraneous Matter

The proportion of extraneous matter like dust, stones, earth, stem, leaves, and outer bark of the shoots of cinnamon plant shall not exceed 1.0 percent (*m/m*), when determined in accordance with the method given in 4 of IS 1797.

5.5 Chemical Requirements

Cinnamon, whole, shall also comply with the requirements given in Table 2.

6 PACKING

Cinnamon, whole, shall be packed in sound, clean and dry containers free from any odour that might affect the characteristic odour of cinnamon.

7 MARKING

Following particulars shall be marked or labelled on the container:

a) Name of the product and grade designation;

- b) Variety or the trade name;
- c) Batch or Code number;
- d) Net quantity;
- e) Date of packing;
- f) Producing country;
- g) Name and address of the manufacturer;
- h) Best before (month/year); and
- j) Any other marking required under the Legal Metrology (Packaged Commodities) Rules, 2011 and the Food Safety and Standards (Packaging and Labelling) Regulation, 2011.

8 SAMPLING

Representative samples of cinnamon shall be drawn by the method given in IS 13145.

9 TEST METHODS

9.1 Tests shall be carried out in accordance with the methods given in **5.4**, **5.5** and col 5 of Table 2.

9.2 Quality of Reagents

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

Table 2 Requirements for Cinnamon, Whole

(Clauses 5.5 and 9.1)

Sl No.	Characteristics	Requirement		Method of Test, Ref to
(1)	(2)	Quills Fine/ Quills Average (3)	Other Grades (4)	(5)
i)	Moisture content, percent by mass, Max	12.0	12.0	9 of IS 1797
ii)	Volatile oil content, ml/100 g (dry), Min	1.0	0.8	15 of IS 1797
iii)	Total ash, percent by mass, on dry basis, Max	7.0	7.0	6 of IS 1797
iv)	Ash insoluble in dilute HCl, percent by mass, on dry basis, Max	2.0	2.0	8 of IS 1797
v)	Salmonella in 25 g	Absent	Absent	IS 5887 (Part 3)

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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