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मानक

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IS 3795 (2010): Spices and condiments - Fenugreek, Whole and Ground [FAD 9: Spices and Condiments]



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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भारतीय मानक

मिर्च एवं मसाले — मेथी, साबुत और पिसी — विशिष्टि  
(दूसरा पुनरीक्षण)

*Indian Standard*

SPICES AND CONDIMENTS — FENUGREEK, WHOLE  
AND GROUND — SPECIFICATION  
(*Second Revision*)

ICS 67.220.10

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**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.

This standard was first issued in 1966 and first revised in 1993 whereby requirements for extraneous matter and for fenugreek, ground were added. In this second revision, the requirements have been updated to align with the standards for fenugreek, whole and ground, laid down under the *Prevention of Food Adulteration Rules, 1955* and also with the ISO Standard on the subject, ISO 6575 : 1982 'Fenugreek, whole or ground (powdered) — Specification'. The categorization of fenugreek, whole, into various grades has been removed and only a single specification has been prescribed for fenugreek, whole, in this revision.

Of the various spices exported from India, fenugreek (commonly known as *METHI DANA*) accounts for a sizable quantity. It is exported to some of the middle eastern and continental countries. This standard has been formulated to augment further our export of fenugreek and to make available fenugreek of proper quality to consumers.

Due consideration has also been given to the *Prevention of Food Adulteration Rules, 1955* and the *Standards of Weights and Measures (Packaged Commodities) Rules, 1977*. However, this standard is subject to restrictions imposed under these rules, wherever applicable.

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*

**SPICES AND CONDIMENTS — FENUGREEK, WHOLE  
AND GROUND — SPECIFICATION**

*(Second Revision)*

**1 SCOPE**

This standard prescribes the requirements and methods of test for fenugreek seeds (*Trigonella foenum-graecum* L.), whole and in ground form.

**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:

<i>IS No.</i>	<i>Title</i>
1070 : 1992	Reagent grade water ( <i>third revision</i> )
1797 : 1985	Methods of test for spices and condiments ( <i>second revision</i> )
5887 (Part 3) : 1999/ISO	Methods for detection of bacteria responsible for food poisoning: Part 3
6579 : 1993	General guidance on methods for the detection of <i>Salmonella</i> ( <i>second revision</i> )
13145 : 1993	Spices and condiments — Methods of sampling ( <i>first revision</i> )
14216 : 1994	Code for hygienic conditions for spices and condiments processing units

**3 DESCRIPTION**

Fenugreek is constituted by dried mature seeds of *Trigonella foenum-graecum* L. The seeds are smooth, oblong to rhomboidal in outline, with a deep, oblique furrow on one side, yellow to yellowish-brown in colour, the size and shape being characteristic of the type and variety. The seeds shall not be black or green.

**4 REQUIREMENTS****4.1 Odour and Flavour**

The aroma or flavour of fenugreek seeds shall be characteristic of fenugreek. The material shall be free from foreign taste and aroma or flavour as well as from

any musty odour. It shall be free from added colouring matter. The flavour of ground (powdered) fenugreek shall be farinaceous and very bitter. Ground (powdered) fenugreek shall be free from rancidity.

**4.2 Freedom from Moulds and Insect Attack**

The fenugreek seeds shall be free from visible insect and moulds, and shall be practically free from dead insects, insect fragments and contamination by rodents, visible to the naked eye, (corrected, if necessary, for abnormal vision) with such magnification as may be necessary in any particular case. In case the magnification exceeds X 10, this fact should be stated in the test report. The proportion of insect damaged matter shall not exceed 1 percent (*m/m*).

**4.3 Extraneous Matter**

It includes organic matter, such as, calyx pieces, stalklets, loose tops, stem, straw or any other vegetable matter. It also includes inorganic matter, such as, dust, dirt, stones, lumps of earth, sand and grit. The proportion of extraneous matter, when determined by the method specified in 4 of IS 1797, shall not exceed 2 percent (*m/m*).

**4.4** Fenugreek, whole and ground shall also conform to the requirements given in Table 1.

**4.5** The fenugreek, whole and powder shall be manufactured and packed under hygienic conditions (*see* IS 14216).

**4.6** Pesticide residues and metallic contaminants in the product shall not exceed the limits as prescribed in the *Prevention of Food Adulteration Act, 1954* and the Rules made thereunder.

**5 PACKING AND MARKING**

**5.1** Fenugreek seeds shall be packed in clean, sound and dry container made of metal, glass, foodgrade polymers, wood or jute bags. The wooden boxes or jute bags shall be suitably lined with moisture proof lining which does not impart any foreign smell to the product. The container shall be free from any fungal or insect infestation and should not impart any foreign

**Table 1 Requirements for Fenugreek, Whole and Powder**  
(Clause 4.4)

Sl No.	Characteristic	Requirement		Method of Test, Ref to
		Whole	Ground	
(1)	(2)	(3)	(4)	(5)
i)	Moisture, percent by mass, <i>Max</i>	10.0	10.0	9 of IS 1797
ii)	Total ash on dry basis, percent by mass, <i>Max</i>	5.0	5.0	6 of IS 1797
iii)	Dilute HCl insoluble ash on dry basis, percent by mass, <i>Max</i>	1.5	1.5	8 of IS 1797
iv)	Cold water soluble extract on dry basis, percent by mass, <i>Min</i>	30.0	30.0	11 of IS 1797
v)	Edible seeds other than fenugreek, percent by mass, <i>Max</i>	2.0	—	Physical separation and weighing
vi)	<i>Salmonella</i> (in 25 g)	Absent	Absent	IS 5887 (Part 3)

smell. Each container shall be securely closed and sealed.

Fenugreek powder shall be packed in sealed, clean and sound tin plate or glass containers or paper cartons properly lined with waterproof paper or in moisture proof bags made of a material which does not impart any smell to fenugreek powder.

### 5.2 Marking

Each container shall be marked with the following particulars:

- a) Name of the material, trade-name or brand name; if any;
- b) Name and address of the manufacturer/packer;
- c) Batch or Code number;
- d) Net mass;
- e) Date of packing;
- f) Year of harvest;
- g) Best before..... (month/year); and

- h) Any other marking as required under the *Standards of Weights and Measures (Packaged Commodities) Rules, 1977* and the *Prevention of Food Adulteration Rules, 1955*.

### 6 SAMPLING

Representative samples of fenugreek whether whole or ground shall be drawn and tested for conformity to this specification as prescribed in IS 13145.

### 7 METHODS OF TEST

The samples of fenugreek shall be tested for ascertaining conformity of the material to the requirements in accordance with the relevant clauses given in col 5 of Table 1.

### 8 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 effect the results of analysis.

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### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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