

Draft for Comments Only

Draft Indian Standard
PACKED TENDER COCONUT WATER - SPECIFICATION
ICS No. 67.080.10

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Processed Fruits and Vegetable Products Sectional Committee, FAD10

FOREWORD

(adoption clause will be added later)

Tender coconut water occupies an important place among the processed coconut products which are exported from India. There is ample scope for the development of external as well as the internal trade for this product. It is necessary to ensure the quality of the products, if the demand is to be maintained and further developed. In order to ensure maintenance of proper quality, it is necessary to have strict quality control based on specifications. It was, therefore, found necessary to formulate an Indian Standard Specification for this product.

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.

1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for Tender Coconut water

2 REFERENCES

The Indian standards listed below 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
IS 2491	Basic principles of hygiene
IS 2860:1964	Methods of sampling and test for processed fruits and vegetables
3815:1993	Method for testing total solids
IS 3881 : 1993	Tomato Juice – Specification
IS 5401 (Part 1) : 2002	Microbiology - General Guidance for the

/ISO 4831 : 1991	Enumeration of Coliforms - Part 1 : Colony Count Technique
IS 5402 : 2002	Microbiology - General Guidance for the
/ISO 4833 : 1991	Enumeration of Microorganisms - Colony Count Technique at 30°C
IS 5403 : 1999	Method for Yeast and Mould Count of Foodstuffs
IS 5887 (Part 1): 1976	Methods for Detection of Bacteria Responsible for Food Poisoning - Part I: Isolation, Identification and Enumeration of Escherichia Coli
IS 5887 (Part 2): 1976	Methods for detection of bacteria responsible for food poisoning: Part 2 Isolation, identification and enumeration of STAPHYLOCOCCUS AUREUS and faecal streptococci
IS 5887 (Part 3) : 1999	Methods for Detection of Bacteria Responsible for
/ISO 6579 : 1993	Food Poisoning - Part 3 : General Guidance on Methods for the Detection of Salmonella
IS 7585 : 1995	Wines - Methods of Analysis
IS 9396	
(Part 1) : 1987	Tinplate requirements (<i>first revision</i>)
(Part 2) : 1987	Sizes and general requirements (<i>first revision</i>)
IS 11764 : 2005	Sweetened Condensed Milk - Determination of
/ISO 2911 : 2004	Sucrose Content - Polarimetric Method
IS 11984:1986	Glass bottle for free flowing liquids

3 REQUIREMENTS

3.1 Description

The term tender coconut water shall mean exclusively the natural aqueous liquid endosperm of the 5-6 month old coconut without addition of the solid endosperm

3.2 Hygienic Conditions

The material shall be manufactured and packed under hygienic conditions (*see* IS 2491) The basic principles of hygiene underlining the technical advice in this code should be applied with appropriate modification.

3.3 The product shall also conform to the requirements given in Table 1

3.4 Food Additives

Food Additive namely Niacin is permitted within the restrictions and use prescribed under Part XIX Use of food additives in food products under the PFA Act 1955.

3.5 Hygiene

It is recommended that the product be prepared in accordance with the GMP and HACCP standards.

3.6 Labelling

The name of the product on the label shall be “Tender Coconut Water or Matured Coconut Water.” The provisions of the General Standard for labeling prescribed under PART - VII - Packing and Labelling of Foods- PFA Act –Rule 32 shall apply.

3.7 The pesticide residues, heavy metals, aflatoxins etc., if any in the product shall not exceed the limit as prescribed in Prevention of Food Adulteration Act, 1954 and the Rules made thereunder. Additionally, Prevention of Food Adulteration Act, 1954 and Standards of Weights and Measures Act, 1977 requirements wherever applicable has to be complied with.

Table 1 Specifications for tender coconut water
(Clause 3.3)

Sl No	Characteristic	Requirement	Method of test
1.	Total solids	4.71 g/100ml	IS 13815: 1993
2.	Reducing sugar	0.08 g/100ml	Cl. 7 of IS 7585: 1995
3.	Sucrose	1.28 g/100ml	IS 11764 : 2005
4.	Total sugar	2.08 g/100ml	AOAC 17 th edn,2000, Official Method 925.35
5.	Ash	0.62 g/100ml	AOAC 17 th edn,2000, Official Method 930.35
6.	pH	4.5	Annex D of IS 3881:1993
7.	Total, Plate Count	5000/gm max.	IS 5402:2002
8.	Yeast & mould	50/gm max	IS 5403:1999
9.	E. coli	10 per g	IS 5887 (Part 1):1976
10.	Coliforms	Nil	IS 5401 (Part 1): 2002
11.	Salmonella	Nil	IS 5887 (Part 3): 1999
12.	Staphylococci	10 per g	IS 5887 (Part 2): 1976

4 SAMPLING

Unless otherwise agreed to between the purchaser and the supplier sampling for lot acceptance shall be done in accordance with Annex 3 of IS 2860.

5 PACKING AND MARKING

5.1 Packing

Tender coconut water shall be packed either in hermetically sealed open top sanitary cans (IS 9396) or in food grade plastic material or glass bottles (IS 11984) or flexible packs or aseptic packages.

5.2 Marking

Each container shall be marked with the following particulars:

- a) Name of the product;
- b) Brand name, if any;
- c) Name and address of manufacturer;
- d) Batch or code number;
- e) Net quantity;
- f) List of ingredients in descending order of proportion;
- g) Month and year of manufacture;
- h) The words 'Best before (month and year to be indicated)'; and

j) Any other information required under the *Standards of Weights and Measures (Packaged Commodities) Rules, 1977, Prevention of Food Adulteration Rules, 1955, and Fruit Products Order, 1955.*

5.3 BIS Certification Marking

The product may also be marked with the Standard Mark.

5.3.1 The use of the Standard Mark is governed by the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.