

भारतीय मानक
Indian Standard

IS 12924 : 2023

बूरा — विशिष्टि

(पहला पुनरीक्षण)

Bura — Specification

(First Revision)

ICS 67.180.10

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May 2023

Price Group 4

Sugar Industry Sectional Committee, FAD 02

FOREWORD

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

Bura is the product made by recrystallization of any kind of sugar or *Khandsari* sugar and made into fine free flowing powder. *Bura* is being produced in a considerable quantity in the country.

This standard was originally published in 1990. In this first revision of this standard, the types of *Bura*, namely, white *Bura* and yellow *Bura* have been omitted. Requirements for reducing sugar, loss on drying, acid insoluble and sulphur dioxide have been modified. Amendment No. 1, 2 and 3 have been incorporated.

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

The composition of the committee responsible for the formulation of this standard is listed at Annex B.

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 test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. 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

BURA — SPECIFICATION

(First Revision)

1 SCOPE

This standard prescribes the requirements and methods of test for *Bura* manufactured by any kind of sugar.

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
IS 1070 : 1992	Reagent grade water — Specification (<i>third revision</i>)
IS 1943 : 1995	Textiles — A-twill jute bags (<i>second revision</i>)
IS 10146 : 1982	Specification for polyethylene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 10910 : 1984	Specification for polypropylene and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 14968 : 2015	Textiles — High density polyethylene (HDPE)/polypropylene (PP) woven sacks for packing 50 kg/25 kg sugar — Specification (<i>first revision</i>)
IS 15279 : 2003	Sugar and sugar products — Methods of test

3 REQUIREMENTS

3.1 Description

Bura shall be prepared by re-crystallization of any kind of sugar and shall be in the form of free flowing amorphous powder.

3.2 *Bura* shall be sweet to taste and shall not possess sour salty or any other objectionable taste.

3.3 The material shall be free from other extraneous matter and substances deleterious to health. It shall also be free from iron filings and added colouring matter.

3.4 The material shall also comply with the requirements of Table 1.

4 SAMPLING

Sampling shall be done as agreed to between the purchaser and the supplier.

5 TESTS

5.1 Tests shall be carried out in accordance with methods prescribed in col 4 of Table 1.

5.2 Quality of Reagents

Unless specified otherwise, pure chemicals shall be employed in tests and distilled water (*see* IS1070) shall be used where the use of water as a reagent is intended.

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

6 PACKING AND MARKING

6.1 Packaging

Bura sugar shall be packed in clean, sound and new jute bags (*see* IS 1943) or bags made of polypropylene (*see* IS 10910) or bags made of high density polyethylene (*see* IS 10146). The jute bags may be lined with polyethylene film. The mouth of each bag shall be either machine-stitched or rolled over and hand-stitched. If hand-stitched, the stitches shall be in two rows with at least 14 stitches in each row (*see* IS 14968).

6.2 In the case of smaller consumer packs the product shall be packed in food grade plastics conforming to relevant Indian Standard or any other suitable food grade non-toxic material.

6. MARKING

6.1 Each bags/packs shall bear legibly and indelibly the following particulars:

- Name of the product;

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- b) Name and address of the manufacturer;
- c) Month and year of manufacture;
- d) Batch or code number;
- e) Net quantity;
- f) Expiry date in month and year, and
- g) Any other information required under *The Legal Metrology (Packaged Commodities) Rules, 2011* and *The Food Safety and Standards (Packaging and Labeling) Regulations, 2011*.

6.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

Table 1 Requirements for Bura
(Clauses 3.4 and 5.1)

SI No.	Characteristics	Requirement	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Polarization, °Z, <i>Min</i>	93.0	Clause 5 of IS 15279
ii)	Reducing sugar, percent by mass, <i>Max</i>	2.5	Clause 7 of IS 15279
iii)	Loss on drying, percent by mass, <i>Max</i>	1.0	Clause 4 of IS 15279
iv)	Sulphur dioxide mg/kg, <i>Max</i>	50	Clause 13 of IS 15279
v)	Ash insoluble in dilute hydrochloric acid, (on dry basis), percent by mass, <i>Max</i>	0.25	Annex A
vi)	Sulphated ash, percent by mass, <i>Max</i>	0.6	Clause 9 of IS 15279

ANNEX A
[Table 1, Item (v)]

DETERMINATION OF ACID INSOLUBLE ASH

A-1 REAGENT

A-1.1 Dilute Hydrochloric Acid — Approximately 5 N (prepared from concentrated hydrochloric acid).

A-2 PROCEDURE

A-2.1 Weigh accurately about 5 g of the sample in a tared, clean and dry platinum basin of 100 ml capacity. Carbonize the material in the dish with the flame of a burner. Complete the ignition by keeping in a muffle furnace at $(550 \pm 25)^\circ\text{C}$ until grey ash results. Cool in a desiccator. To the ash, add 25 ml of the dilute hydrochloric acid, cover with a watch glass and heat on a small flame of a burner to near boiling, allow to cool and filter the contents of dish through whatman filter paper no. 42 or its equivalent. Wash the filter paper with hot water until the washings are free from chlorides. Return the filter paper and the residue to the dish. Keep it in an air-oven maintained at $(105 \pm 2)^\circ\text{C}$ for about 3 hours, Ignite in the muffle

furnace at $(550 \pm 25)^\circ\text{C}$ for one hour. Cool the dish in a desiccator and weigh. Heat again for 80 minutes in the muffle furnace, cool and weigh. Repeat this process of heating for 30 minutes, cooling and weighing till the difference between two successive weighing is less than one milligram. Note the lowest mass.

A-3 CALCULATION

A-3.1 Acid insoluble ash, percent by mass =

$$\frac{100 M_1}{M_2}$$

where

M_1 = mass, in g, of acid insoluble ash; and

M_2 = mass, in g, of sample taken for the test.

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ANNEX B

(Foreword)

COMMITTEE COMPOSITION

Sugar Industry Sectional Committee, FAD 02

<i>Organization</i>	<i>Representative(s)</i>
National Sugar Institute, Kanpur	SHRI NARENDRA MOHAN (Chairperson)
Army Service Core (ASC), New Delhi	LT COL B. B. SAHU
CONCERT, Chennai	SHRI R. SANTHANAM SHRI M. SOMASUNDARAM (<i>Alternate</i>)
Consumer Guidance Society Of India, Mumbai	SHRI SITARAM DIXIT DR M. S. KAMAT (<i>Alternate</i>)
Food Corporation of India, New Delhi	SHRI DEEPAK KUMAR PANWAR SHRI RAKESH KUMAR RANJAN (<i>Alternate</i>)
Food Safety Standards Authority of India, New Delhi	MS APOORVA SRIVASTAVA
Global Cane Sugar Ltd, New Delhi	DR G. S. C. RAO SHRI ANIL SRIVASTAVA (<i>Alternate</i>)
Indian Institute of Sugarcane Research, Lucknow	DR A. D. PATHAK DR A. K. SHARMA (<i>Alternate</i>)
Indian Institute of Toxicology Research, Lucknow	DR YOGESHWER SHUKLA
Indian Sugar Exim Corporation, New Delhi	SHRI RAJIV AGGARWAL SHRI RAJEEV KURUP (<i>Alternate</i>)
Indian Sugar Mills Association, New Delhi	SHRI G. K. THAKUR SHRI DEEP MALIK (<i>Alternate</i>)
MAARC Labs, Pune	DR VASUDHA KESKAR
MANAS Industry, Maharashtra	SHRI JEEVAN VASANT JADHAV
Ministry of Consumer Affairs, Food & Public Distribution, New Delhi	SHRI SURESH CHANDRA
National Co-Operative Development Corporation, New Delhi	SHRI K. P. VAISH SHRI N. K. SHARDA (<i>Alternate</i>)
National Federation of Co-Operative Development Corporation, New Delhi	SHRI PRAKESH P. NAIKNAVARE SHRI S. SOMASUNDARAM (<i>Alternate</i>)
The Sugar Technologists Association of India, New Delhi	SHRI SANJAY AWASTHI SHRI ANURAG GOYAL (<i>Alternate</i>)
Triveni Engineering & Industries Limited, Muzaffar nagar, UP	SHRI RAJESH SINGH SHRI P. K. KHADELWAL (<i>Alternate</i>)
Tamil Nadu Sugar Corporation Limited (TASCO), Chennai	SHRI E. MUTHUVELAPPAN

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<i>Organization</i>	<i>Representative(s)</i>
Vasantdada Sugar Institute, Pune	DR RAJEEV DANI
Walchand nagar Industries, Mumbai	SHRI D. R. SARDESHMUKH SHRI P. V. KAWADE (<i>Alternate</i>)
BIS Directorate General	SHRIMATI SUNEETI TOTEJA, SCIENTIST 'E'/ DIRECTOR AND HEAD (FOOD AND AGRICULTURE) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary
SHRI RAJPAL
SCIENTIST 'D'/JOINT DIRECTOR
(FOOD AND AGRICULTURE), BIS

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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