

भारतीय मानक  
वस्त्रादि—50 कि ग्रा खाद्यान्न पैक करने के लिए  
पटसन के बोरे—विशिष्टि  
( दूसरा पुनरीक्षण )

*Indian Standard*  
TEXTILES — JUTE BAGS FOR PACKING 50 kg  
FOODGRAINS — SPECIFICATION  
( *Second Revision* )

ICS 55.080,59.080.30

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**BUREAU OF INDIAN STANDARDS**  
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NEW DELHI 110002

## FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Jute and Jute Products Sectional Committee had been approved by the Textile Division Council.

This standard was originally published in 1989 and revised in 1997 on the basis of experience gained during its use. The present revision has been made in the light of experience gained since its first revision and to incorporate the following major changes:

- a) Tolerances on length, width and mass of bag have been reduced for improved structure and serviceability,
- b) Sampling and criteria for conformity have been modified,
- c) Classified major and minor defects have been incorporated to minimize failures during storage and end use,
- d) Oil content percent has been reduced to 3 percent, and
- e) Use of joined bag is now not permitted in the standard.

A scheme for labelling environment friendly products known as ECO-Mark has been introduced at the instance of the Ministry of Environment and Forests (MEF), Government of India. The ECO-Mark would be administered by the Bureau of Indian Standards (BIS) under the *BIS Act*, 1986. For a product to be eligible for ECO Marking, it shall also carry the Standard Mark of BIS besides meeting the additional environment friendly requirements as applicable. However, these requirements shall be optional and manufacturing units shall be free to opt for Standard Mark alone also.

Therefore, opportunity has been availed to incorporate environment friendly requirements applicable to Jute based on the Gazette Notification No. 457 dated 21 February 1991 published in the Gazette of India.

There is no ISO Standard on the subject. This standard has been prepared based on indigenous data/practices prevalent in the field in India.

The composition of the Committee responsible for formulation of this standard is given in Annex D.

For the purposes 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

## TEXTILES — JUTE BAGS FOR PACKING 50 kg FOODGRAINS — SPECIFICATION

### ( Second Revision )

#### 1 SCOPE

This standard prescribes constructional details and other requirements of jute bags for packing 50 kg foodgrains.

#### 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
2873 : 1991	Textiles — Packaging of jute products in bales — Specification (second revision)
5476 : 1986	Glossary of term relating to jute (first revision)
9113 : 1993	Textiles — Jute sacking — General requirements (first revision)

#### 3 TERMINOLOGY

For the purpose of this standard, the definitions given in IS 5476 shall apply.

#### 4 MANUFACTURE

**4.1** The bags shall be made from single piece of double warp, 2/1 twill weave jute sacking of uniform construction having nominal mass of 579 g/m<sup>2</sup> with warp running along the length of the bag. There shall be a single blue stripe, or stripes woven along the length of the bag or the bag shall be without stripe as agreed to between the buyer and the seller. The constructional particulars of sacking used in the fabrication of the bags shall be such that the bags meet the requirements specified in Table 1

##### 4.2 Seam

The sides of the bags shall be sewn with overhead or herakle stitches on selvedge through two layers of sacking as specified in IS 9113. The number of stitches per decimetre shall be  $10 \pm 1$ .

##### 4.3 Safety Stitch

If agreed to between the buyer and the seller, a line of

safety union stitch shall be provided at the inner edges of the overhead or herakle stitches (see IS 9113). The number of safety union stitches per decimetre shall be  $10 \pm 1$ .

##### 4.4 Hemming at the Mouth

Provisions of IS 9113 shall apply.

##### 4.5 Freedom from Defects

The bags shall meet the requirement of freedom from major defects as given in Annex A.

#### 5 SPECIFIC REQUIREMENTS

**5.1** The bags shall conform to the requirements specified in Table 1.

**5.2** The bales containing the bags shall also conform to the requirements specified in Table 2.

**5.3** The contract moisture regain shall be 20 percent.

##### 5.4 Additional Requirements for Labelling as Environment Friendly Products

###### 5.4.1 General Requirement

**5.4.1.1** The bags shall confirm to the requirements for quality and performance prescribed under 5.1 to 5.3.

**5.4.1.2** The manufacturers shall produce to BIS, environmental consent clearance from the concerned State Pollution Control Board as per the provisions of *Water (Prevention and Control of Pollution) Act, 1974* and *Air (Preventions and Control of Pollution) Act, 1981* along with the authorization, it required under the *Environment (Products) Act, 1986* and the Rules made there under, while applying for ECO-Mark. Additionally, the manufacturer shall produce documentary evidence on compliance of the provisions related to noise level and occupational health under the provisions of *Factory Act, 1948* and Rules made there under.

**5.4.1.3** The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.

**5.4.1.4** The material used for product packaging shall be reusable or made from recyclable or biodegradable materials.

**5.4.1.5** Fatty alcohol based non-ionics as emulsifier should be used wherever required.

**Table 1 Requirements of Jute Bags**  
(Clauses 4.1 and 5.1)

SI No.	Characteristic	Requirement	Tolerance	Method of Test, Ref to Cl of IS 9113
(1)	(2)	(3)	(4)	(5)
i)	Dimensions ( <i>see Note</i> ) :			8.3.2
	a) Outside length, cm	94	+3 cm -0	
	b) Outside width, cm	57	+3 cm -0	
ii)	Ends/dm	76	+4 -2	8.4.2
iii)	Picks/dm	28	+2 -1	8.4.2
iv)	Corrected mass/bag, g ( <i>see Note</i> )	665	+7.5 percent -6.0 percent	8.5.2
v)	Average breaking strength of sacking (ravelled strip method, 10 cm × 20 cm), <i>Min</i> , N(kgf) :			8.6.2
	a) Warpway	1570 (160)	-	
	b) Weftway	1420 (145)	-	
vi)	Average seam strength (5 cm × 20 cm ravelled strip), <i>Min</i> N(kgf)	490 (50)	-	8.7
vii)	Moisture regain, percent, <i>Max</i>	22	-	8.2
viii)	Oil content on dry de-oiled material basis, percent, <i>Max</i>	3	-	8.8

NOTE — The bags of specified dimensions are suitable for packing of wheat, rice and similar coarse grains. For packing of other materials, the buyer and the seller may agree to the dimensions other than those specified above. The mass of such bags may be calculated by the method given in 5.3 of IS 9113. However, tolerances specified in this table dimension and on the mass shall be permissible.

**Table 2 Requirements of Packed Bales**  
(Clause 5.2)

SI No.	Characteristic	Requirement	Method of Test, Ref to Cl of IS 9113
(1)	(2)	(3)	(4)
i)	Total number of bags per bale ( <i>see Note 1</i> )	500	8.9
ii)	Number of bags per bundle ( <i>see Note 2</i> )	25	-
iii)	Contract mass of a bale, kg ( <i>see Note 3</i> )	332.5	-
iv)	Corrected net mass of a bale, kg	Not less than contract mass	8.1

**NOTES**

- The number of bags per bale shall be 500 or as specified in an agreement between the buyer and the seller.
- No joined bag shall be permitted in the bundles.
- Contract mass of a bale is calculated as follows:  
Contract mass of a bale = nominal mass of bag × specified number of bags per bale.

**5.4.1.6** Polyhalogenated based phenolic fire retardants shall not be used.

#### 5.4.2 Specific Requirements

**5.4.2.1** The bags shall confirm to the requirements given in Table 3.

### 6 PACKING

The bags shall be packed in bales as prescribed in IS 2873 or as specified in the agreement between the buyer and the seller.

### 7 MARKING

**7.1** The bales shall be marked as prescribed in IS 2873. Additional markings shall be made as stipulated by the buyer or required by regulation or law in force.

#### 7.2 BIS Certification Marking

The bales may also be marked with the Standard Mark.

**7.2.1** The use of the Standard Mark is governed by the provisions of 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 the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

**7.3** The bales may also be marked with ECO-Mark in addition to Standard Mark if the requirements specified in 5.4 are also satisfied.

### 8 SAMPLING AND CRITERIA FOR CONFORMITY

#### 8.1 Lot

All bales of jute bags of same size produced under

similar conditions of production and delivered to a buyer against one dispatch note shall constitute a lot.

#### 8.2 Sample Size and Criteria for Conformity

For assessing the conformity of lot to the requirements of this standard, bales shall be first selected from each lot at random in accordance with the col 2 and 3 of Table 4. All the bales so selected in the sample shall be tested for 'Gross mass of bales', 'Tare mass of bailing hoops and other packing materials' and 'Number of bundles per bale'. Two bundles of bags selected at random from each bale selected in the sample shall be tested for total number of bags per bundle.

The lot shall be considered as conforming to the requirements of this standard if all the following conditions are satisfied:

- a) Total corrected net mass of all the bales in the sample is not less than the total contract mass of all the bales.
- b) Total number of bags in each bale selected as per 8.2 meet the relevant requirement.

#### 8.3 Sample Size for Bags

For freedom from defects, length, width, ends/dm, picks/dm, number of stitch/dm, mass per bag and moisture regain, 16 bags shall be selected at random from each of the bales selected as per 8.2. The total number of bags to be tested from each lot for these requirements is given in col 4 of Table 4.

#### 8.4 Criteria for Conformity

##### 8.4.1 Criteria for Conformity for Freedom from Defects

Each bag selected in the sample shall be tested for

**Table 3 Specific Requirements for ECO-Mark**

(Clause 5.4.2.1)

Sl No.	Parameter <sup>1)</sup>	Maximum Limit, Hessians and Sackings mg/kg (ppm)
(1)	(2)	(3)
i)	Non-halogenated hydrocarbons	3 percent
ii)	Pesticides (Sum parameter) <sup>2)</sup> Banned Pesticides	1.0 Nil (Below detectable limit)
iii)	pH of aqueous extract	6.0–7.0
iv)	Coupled aminess from azo-dyes (Sum parameters) <sup>3)</sup>	50.0 (Detectable limit using GC-MS)

<sup>1)</sup> The methods of tests for ECO-parameters are being developed by BIS and Textiles Committee. Till the methods of tests are standardized, the manufacturer shall declare conformance taking into consideration the chemicals, auxiliaries and dyes used.

<sup>2)</sup> The list of pesticides used on jute, banned restricted or withdrawn is appended as Annex B.

<sup>3)</sup> The list of coupled amines released from azo-dyes is appended as Annex C.

Table 4 Sample Size and Acceptance Numbers  
(Clauses 8.2, 8.3, 8.4.1 and 8.4.2)

Sl No.	No. of Bales in the Lot	No. of Bales in the Sample	For Length, Width, Number of Stitches/dm, Ends/dm, Picks/dm, Moisture Regain		
			No. of Bags from Each Bale	Total Number of Bags in Sample	Acceptance Number
(1)	(2)	(3)	(4)	(5)	(6)
i)	Upto 25	5	16	80	5
ii)	26-90	8	16	128	7
iii)	91-300	13	16	208	10
iv)	301-500	20	16	320	14

NOTE — If the number of bales in a consignment exceeds 500, the same shall be split into number of lots each comprising maximum of 500 bales.

freedom from defects. A bag shall be termed as defective, if it contains two or more major defects (see Annex A). A lot shall be considered conforming to this requirement, if the number of defectives is less than or equal to the acceptance number given in col 6 of Table 4. Acceptance number given in Table 4 is on the basis of an AQL of 2.5 percent.

8.4.2 Criteria for Conformity for Length, Width, Ends/dm, Picks/dm, Number of Stitches/dm and Moisture Regain

The lot which meets the requirements of 8.4.1 shall be tested for length, width, ends/dm, picks/dm, number of stitches/dm and moisture regain as per the plan. A bag shall be termed as defective, if it fails to meet any one or more of these requirements. The lot shall be considered as conforming to the requirements of length, width, ends/dm, picks/dm, stitches/dm and moisture regain, if the total number of defectives found in the sample is less than or equal to the corresponding acceptance number given in col 6 of Table 4.

8.4.3 Criteria for Conformity for Mass per Bag

The lot, which meets the above requirements, shall then be tested for mass of bag. The lot shall be declared as conforming to this requirement if :

- a) Average value of mass per bag, as obtained for sampled bags is not less than the nominal value specified, and
- b) Not more than 10 percent of the individual values

of mass of bags is below the lower specified value.

8.5 Sample Size and Criteria for Conformity for Breaking Strength Requirement

The lot, which meets the above requirements shall then be tested for breaking strength requirements. For this purpose, one bag shall be selected at random from each bale selected in the sample. Suitable test specimens shall be taken from these bags and tested for warpway, weftway and seam strength. The lot shall be declared as conforming to these requirements if :

- a) Average values of warpway, weftway and seam breaking strengths respectively, as obtained for all test specimens are not less than the corresponding values specified, and
- b) None of the individual value is less than 20 percent below the specified value.

8.6 Sample Size and Criteria for Conformity for Oil Content

The lot, which meets the above requirements, shall then be tested for oil content. For this purpose two bags shall be selected out of two different bales selected as per 8.2. The lot shall be declared as conforming to this requirement, if both the bags meet the requirement of oil content.

8.7 The lot shall be considered as conforming to the requirements of this standard, if 8.2 and 8.4 to 8.6 are satisfied.

**ANNEX A**  
(Clause 4.5)  
**CLASSIFICATION OF DEFECTS**

<i>Type of Defect</i>	<i>Description</i>		<i>Major</i>	<i>Minor</i>
GAW	Portion over the whole width of the fabric completely unwoven with weft.	>1.5 cm	x	
		0.5 cm to 1.5 cm		X
Multiple broken/ missing warp (end)	Two or more contiguous, regardless of length		x	
	Single, more than 25 cm long		x	
	Single 25 cm long or less			X
Multiple broken weft (pick)	Two or more contiguous, regardless of length		x	
	One pick, full width			X
Cut, hole, tear or patch	Two or more warp or filling threads ruptured at adjoining points		x	
Float	A place in the fabric where warp and weft yarns escape the required interlacement	> 2 sq cm	x	
		0.5 cm to 2 cm		X
Gap stitching	Stitches missing	>1.5 cm	x	
		0.5 cm to 1.5 cm		X
Corner gap	Corner of the bag not properly stitched resulting in formation of hole	>1.5 cm	x	
		0.5 cm to 1.5 cm		X
Mildew	Staining of fabric due to fungal or bacterial growth visible to naked eye		x	

## NOTES

1 x – Major Defects

X – Minor Defects

2 Two minor defects shall be counted as one major defect.

**ANNEX B***(Table 3)***LIST OF PESTICIDES USED ON JUTE, BANNED, RESTRICTED OR WITHDRAWN****B-1 PESTICIDES REGISTERED FOR USE ON JUTE IN INDIA**

- HERBICIDES : Dalapon
- FUNGICIDES : Carbendazim
- INSECTICIDES : Carbaryl, Carbofuran,  
Endosulfan, Lindane,  
Phosalone, Quinalphos

**B-2 EXTRACT FROM LIST OF PESTICIDES NOT APPROVED, RESTRICTED USE, WITHDRAWN OR BANNED IN THE COUNTRY AS ON 10.04.1992****B-2.1 Pesticides not Approved for Use**

2, 4, 5-T

**B-2.2 Pesticides Restricted for Use**

Use of DDT in agriculture is banned. In very special circumstances warranting the use of DDT for plant protection, the State or Central Government may purchase it directly from M/s Hindustan Insecticides Ltd, to be used under expert Government supervision. Use of DDT for public health programme up to 10 000 MT per annum, except in case of any major outbreak, is restricted.

Use of Dieldrin shall be restricted for Locust Control in desert areas by Plant Protection Advisor to the Government of India.

**B-2.3 Pesticides Banned/Withdrawn**

Pentachlorophenol, Toxaphene and Aldrin.

**ANNEX C***(Table 3)***LIST OF COUPLED AMINES RELEASED FROM AZO—DYES**

- |                                   |   |
|-----------------------------------|---|
| i) 4-Aminodiphenyl                | xii) 3,3' – Dimethylbenzidine                       |
| ii) 2-Amino-4-nitrotoluene        | xiii) 3,3' – Dimethyl-4,4' diaminodiphenylmethane   |
| iii) Benzidine                    | xiv) <i>p</i> -kresidin (2-Methoxy 5-methylaniline) |
| iv) 4-Chloro- <i>o</i> -toluidine | xv) 4,4' Methylene-bis-(2-chloraniline)             |
| v) 2-Naphylamine                  | xvi) 4,4' Oxydianiline                              |
| vi) <i>o</i> -Aminoazotoluene     | xvii) 4,4' Thiodianiline                            |
| vii) <i>p</i> -Chloraniline       | xviii) <i>o</i> -Toluidine                          |
| viii) 2,4-Diaminoanisole          | xix) 2,4, – Toluylenediamine                        |
| ix) 4,4' – Diaminodiphenylmethane | xx) 2,4,5 – Trimethylaniline                        |
| x) 3,3' – Dimethoxybenzidine      | xxi) <i>p</i> -Amino-azobenzene                     |
| xi) 3,3' – Dimethoxybenzidine     | xxii) 2-Methoxyaniline                              |

**ANNEX D***(Foreword)***COMMITTEE COMPOSITION****Jute and Jute Products Sectional Committee, TX 03**

<i>Organization</i>	<i>Representative(s)</i>
Office of the Jute Commissioner, Kolkata	SHRI S. MAJUMDAR ( <b>Chairman</b> )
Andhra Pradesh Jute Mills Association, Hyderabad	REPRESENTATIVE
Directorate General of Supplies & Disposals, Quality Assurance Wing, New Delhi	SHRI A. K. SEHGAL
Eskaps (India) Private Ltd, Kolkata	SHRI M. M. DUBEY ( <i>Alternate</i> )
	SHRI SHEKHAR GUHA
	SHRI ARBINDA KAR ( <i>Alternate</i> )
Export Inspection Council of India, New Delhi	SHRI R. C. GUPTA
	SHRI S. BANERJEE ( <i>Alternate</i> )
Food Corporation of India, New Delhi	REPRESENTATIVE
Indian Jute Industries' Research Association, Kolkata	DR D. SUR
	DR A. K. MUKHOPADHYAY ( <i>Alternate</i> )
Indian Jute Mills Association, Kolkata	REPRESENTATIVE
	SHRI H. N. GHOSH ( <i>Alternate I</i> )
	SHRI ARIJIT MITRA ( <i>Alternate II</i> )
Indian Sugar Mills Association, New Delhi	SHRI K. K. SHARMA
	SHRI M. N. RAO ( <i>Alternate</i> )
Institute of Jute Technology, Kolkata	DR PRABIR RAY
	SHRI ALOK CHAKRABORTY ( <i>Alternate</i> )
Markfed, Chandigarh	REPRESENTATIVE
Ministry of Consumer Affairs, Food and Public Distribution, New Delhi	DR R. B. DOHAREY
National Federation of Co-operative Sugar Co Ltd, New Delhi	SHRI R. P. SINGHAL ( <i>Alternate</i> )
National Institute of Research on Jute & Allied Fibres (NIRJAF), Kolkata	SHRI VINAY KUMAR
National Jute Manufacturers Corporation Ltd, Kolkata	REPRESENTATIVE
	SHRI A. GHOSH
	SHRI K. K. BOSE ( <i>Alternate</i> )
Office of the Jute Commissioner, Kolkata	SHRI U. SEN
	SHRI R. K. ROY ( <i>Alternate</i> )
Tea Board, Kolkata	REPRESENTATIVE
The Fertilizer Association of India, New Delhi	SHRI R. C. GUPTA
	SHRI S. BANERJEE ( <i>Alternate</i> )
BIS Directorate General	SHRI P. BHATNAGAR, Director & Head (TXD) [Representing Director General ( <i>Ex-officio</i> )]

*Member Secretary*  
SHRI B. L. BHARATI  
Joint Director (TXD), BIS

**Bureau of Indian Standards**

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**Review of Indian Standards**

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of ‘BIS Catalogue’ and ‘Standards: Monthly Additions’.

This Indian Standard has been developed from Doc: No. TXD 03 (0661).

**Amendments Issued Since Publication**

Amend No.	Date of Issue	Text Affected

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**AMENDMENT NO. 1   APRIL 2004**  
**TO**  
**IS 12650 : 2003   TEXTILES — JUTE BAGS FOR**  
**PACKING 50 kg FOODGRAINS — SPECIFICATION**

( *Second Revision* )

( *Page 2, Table 2* ) — Insert the following matter at the end of Table 2:

**Table 2   Requirements of Packed Bales**  
( *Clause 5.2* )

Sl No.	Characteristic	Requirement	Method of Test, Ref to Cl of IS 9113
(1)	(2)	(3)	(4)
v)	Number of joined bags per bundle of 25 bags	1	Visual

( *Page 2, Table 2, Note 2* ) — Delete.

( *Page 3, clause 8.3, last line* ) — Substitute 'col 5' for 'col 4'.

( *Page 4, Table 4, Note* ) — Insert the following at the end of note:

'Joined bags shall also be drawn during sampling of bags for visual inspection and breaking strength test.'

( *Page 5, Annex A, Under 'Description'* ) — Modify the requirements as under:

- i) Delete 'Single, more than 25 cm long' and 'Single 25 cm long or less' specified against 'Multiple broken/missing warp (end)'
- ii) Substitute ' $0.5 \text{ cm}^2$  to  $2 \text{ cm}^2$ ' for ' $0.5 \text{ cm}$  to  $2 \text{ cm}$ ' specified against 'Float'.

( TX 03 )

**AMENDMENT NO. 2 SEPTEMBER 2004**  
**TO**  
**IS 12650 : 2003 TEXTILES —JUTE BAGS FOR**  
**PACKING 50 kg FOODGRAINS — SPECIFICATION**  
**( Second Revision )**

[ Page 2, Table 1, Sl No. (i) (a) and (b), col 4 ] — Replace '+3' by '+4'.

[ Page 2, Table 1, Sl No. (ii), col 4 ] — Replace '-2' by '-3'.

[ Page 2, Table 1, Sl No. (iii), col 4 ] — Replace '-1' by '-2'.

[ Page 2, Table 1, Sl No. (iv), col 4 ] — Replace '+7.5' by '+8'.

( Page 2, Table 1, footnote ) — Add the following note as Note 2 after renumbering the footnote as Note 1 :

'Average moisture regain shall be maximum 22 percent. However, 10 percent of the individual value of moisture regain percent may be above 22 percent with an upper limit of 26 percent.'

( Page 2, Table 1, footnote ) — Add the following note as Note 3:

'Moisture regain shall not be measured on the branding. It shall be measured at least 10 cm away from the branding.'

[ Page 4, clause 8.4.3 (b) ] — Substitute the following for the existing:

'b) Not more than 10 percent of the individual values of mass of bag is below the specified value by more than 12 percent of the specified nominal value.'

( Page 4, clause 8.4.3 (b) ) — Add the following after 8.4.3 (b):

'c) Not more than 10 percent of the individual value of the mass of bags is higher than the specified value.'

**AMENDMENT NO. 3 JANUARY 2013  
TO  
IS 12650 : 2003 TEXTILES — JUTE BAGS FOR PACKING  
50 kg FOODGRAINS — SPECIFICATION**

*(Second Revision)*

*(Page 1, clause 4.1)* — Substitute the following for the existing clause:

‘**4.1** The bags shall be made from single piece of twill weave jute sacking of uniform construction having nominal mass of 579 g/m<sup>2</sup> as given below with warp running along the length of the bag:

- a) *Type A* — Single warp, double weft woven on modern shuttleless loom; and
- b) *Type B* — Double warp, single weft woven on conventional shuttle loom.

There shall be a single blue stripe, or stripes woven along the length of the bag or the bag shall be without stripe as agreed to between the buyer and the seller. The constructional particulars of sacking used in the fabrication of the bags shall be such that the bags meet the requirements specified in Table 1.’

*(Page 2, Table 1)* — Substitute the following for the existing table:

**Amend No. 3 to IS 12650 : 2003**

**Table 1 Requirements of Jute Bags**  
(Clauses 4.1 and 5.1)

SI No.	Characteristic	Requirement		Tolerance	Method of Test, Ref to Clause of IS 9113
		Type A	Type B		
(1)	(2)	(3)	(4)	(5)	(6)
i)	Dimensions ( <i>see</i> Note 1):				8.3.2
	a) Outside length, cm	94	94	+4 -0 cm	
	b) Outside width, cm	57	57	+4 -0 cm	
ii)	Ends/dm	46	76	+4 -3	8.4.2
iii)	Picks/dm	50 (2 × 25)	28	+2 -2	8.4.2
iv)	Corrected mass/bag ( <i>see</i> Note 2), g	665	665	+8.0 -6.0 percent	8.5.2
v)	Average breaking strength of sacking (ravelled-strip method, 10 cm × 20 cm), <i>Min</i> , N(kgf):				8.6.2
	a) Warpway	1570(160) 1420(145)	1570(160) 1420(145)		
	b) Weftway				
vi)	Average seam strength (5 cm × 20 cm ravelled strip), <i>Min</i> N(kgf)	490(50)	490(50)		8.7
vii)	Moisture regain, percent, <i>Max</i>	22	22		8.2
viii)	Oil content on dry de-oiled material, <i>Max</i>	3	3		8.8

**NOTES**

**1** The bags of specified dimensions are suitable for packing of wheat, rice and similar coarse grains. For packing of other materials, the buyer and the seller may agree to the dimensions other than those specified above. The mass of such bags may be calculated by the method given in 5.3 of IS 9113. However, tolerances specified in this table for dimension and on the mass shall be permissible.

**2** Average moisture regain shall be maximum 22 percent. However, 10 percent of the individual value of moisture regain percent may be above 22 percent with an upper limit of 26 percent.

(TXD 03)

Reprography Unit, BIS, New Delhi, India

**AMENDMENT NO. 4 JUNE 2014**  
**TO**  
**IS 12650 : 2003 TEXTILES — JUTE BAGS FOR PACKING 50 kg**  
**FOODGRAINS — SPECIFICATION**

*(Second Revision)*

*(Cover page 1, Hindi and English Title)* — Substitute the following for the existing title:

‘वस्त्रादि — 50 किग्रा तक खाद्यान्न पैक करने के लिये पटसन के बोरे — विशिष्टि  
(दूसरा पुनरीक्षण)’

**‘TEXTILES — JUTE BAGS FOR PACKING FOODGRAINS UP TO 50 kg —**  
**SPECIFICATION**  
*(Second Revision)’*

*(Page 1, Title)* — Substitute the following for the existing title:

**‘TEXTILES — JUTE BAGS FOR PACKING FOODGRAINS UP TO 50 kg —**  
**SPECIFICATION**  
*(Second Revision)’*

*(Page 1, clause 1)* — Substitute the following for the existing:

**‘1 SCOPE**

This standard prescribes constructional details and other requirements of jute bags for packing foodgrains up to 50 kg.’

*(Page 1, clause 2)* — Substitute ‘9113 : 2012 Textiles — Jute sacking — General requirements (second revision)’ for ‘9113 : 1993 Textiles — Jute sacking — General requirements (first revision)’.

*(Page 1, clause 4.1)* — Substitute the following for the existing clause:

‘4.1 The bags shall be made from single piece of twill weave jute sacking of uniform construction having nominal mass of 579 g/m<sup>2</sup> as given below with warp running along the length of the bag:

- a) *Type A* — Single warp, double weft woven on modern shuttleless loom for packing 50 kg foodgrains;
- b) *Type B* — Double warp, single weft woven on conventional shuttle loom for packing 50 kg foodgrains;
- c) *Type C* — Single warp, double weft woven on modern shuttleless loom for packing 30 kg foodgrains; and
- d) *Type D* — Double warp, single weft woven on conventional shuttle loom for packing 30 kg foodgrains.

There shall be a single blue stripe, or stripes woven along the length of the bag or the bag shall be without stripe as agreed to between the buyer and the seller. The constructional particulars of sacking used in the fabrication of the bags shall be such that the bags meet the requirements specified in Table 1.’

*(Page 1, clause 4.2)* — Substitute the following for the existing clause:

‘4.2 The sides of the *Type A* and *Type B* bags shall be sewn with overhead or herakle stitches on selvedge through two layers of sacking as specified in IS 9113. The number of stitches per decimeter shall be  $10 \pm 1$ . The sides and bottom of the *Type C* and *Type D* bags shall be sewn with selvedge at the mouth.’

(Page 2, Table 1) — Substitute the following for the existing table:

**Table 1 Requirements of Jute Bags**  
(Clauses 4.1 and 5.1)

SI No.	Characteristic	Requirement				Tolerance	Method of Test, Ref to Clause of IS 9113
		Type A (3)	Type B (4)	Type C (5)	Type D (6)		
(1)	(2)					(7)	(8)
i)	Dimensions (see Note) :						8.3.2
	a) Outside length, cm	94	94	76	76	+4 -0 cm	
	b) Outside width, cm	57	57	51	51	+4 -0 cm	
ii)	Ends/dm	46	76	46	76	+4 -3	8.4.2
iii)	Picks/dm	50 (2 × 25)	28	50 (2 × 25)	28	+2 -2	8.4.2
iv)	Corrected mass/bag, g (see Note)	665	665	504	504	+8.0 -6.0 percent	8.5.2
v)	Average breaking strength of sacking (ravelled-strip method, 10 cm × 20 cm), Min, N(kgf) :						8.6.2
	a) Warpway	1 570(160)	1 570(160)	1 570(160)	1 570(160)		
	b) Weftway	1 420(145)	1 420(145)	1 420(145)	1 420(145)		
vi)	Average seam strength (5 cm × 20 cm ravelled strip), Min N(kgf) :						8.7
	a) Side	490(50)	490(50)	490(50)	490(50)		
	b) Bottom	—	—	490(50)	490(50)		
vii)	Moisture regain, percent, Max	22	22	22	22		8.2
viii)	Oil content on dry de-oiled material, Max	3	3	3	3		8.8

## NOTES

1 The bags of specified dimensions are suitable for packing of 30 kg/50 kg wheat, rice and similar coarse grains. For packing of other quantities/materials, the buyer and the seller may agree to the dimensions other than those specified above. The mass of such bags may be calculated by the method given in 5.2 of IS 9113. However, tolerances specified in this table for dimension and on the mass shall be permissible.

2 Average moisture regain shall be maximum 22 percent. However, 10 percent of the individual value of moisture regain percent may be above 22 percent with an upper limit of 26 percent.

3 Moisture regain shall not be measured on the branding. It shall be measured at least 10 cm away from the branding.

(TXD 03)

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