#### केन्द्रीय मुहर विभाग-2

हमारा संदर्भ : के.म्.वी.-2/16:11652 28-12-2017

विषय: आई एस 11652: 2017 की प्रारूप एसटीआई

- 1. यह आई एस 11652 : 2000 के पुनरीक्षण आई एस 11652:2017 के संदर्भ में है । यह उत्पाद प्रमाणीकरण के अंतर्गत आता है ।
- 2. उपर्युक्त उत्पाद के लिए कृपया संलग्न प्रारूप एस टी आई/11652/2 XXXX 2017 का अवलोकन करें।
- 3. सभी संबंधित से अनुरोध हैं कि प्रारूप दस्तावेज की जांच करें और **07 जनवरी 2018** तक या उससे पहले केन्द्रीय मृहर विभाग-2 को टिप्पणी भेजें ।
- 4. सभी शाखा कार्यालयों से अनुरोध किया जाता है कि संबंधित प्रारूप दस्तावेज़ों को सभी आवेदकों/ लाइसेंसधारियों को जो उनके अधिकार क्षेत्र में हैं, टिप्पणियों के लिए उनकी जानकारी में लाए और साथ ही टिप्पणियों को, यदि कोई हो, निर्धारित समय के भीतर केन्द्रीय मुहर विभाग-2 को भेजें।

हस्ता/-(आदित्य दास) वैज्ञा.सी.

प्रमुख (CMD-2) (हस्ता/- 28.12.2017)

सभी क्षेत्रीय/शाखा/टीएक्सडी/एमएसडी कार्यालयों को परिचालित

प्रतिलिपि: ITS इंट्रानेट पर अपलोड करने के लिए

#### **CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16:11652 28-Dec-17

#### Subject: Draft STI for IS 11652:2017

- 1. This has reference to the revision of IS 11652:2000 to IS 11652:2017. The product is under certification.
- 2. Please find enclosed draft STI/11652/2 XXXX 2017 for the above product for kind perusal.
- 3. All concerned are requested to examine the draft document and provide comments to CMD-2 on or before **07 January 2018**.
- 4. All BOs are also requested to bring the draft document to the notice of applicants/licensees under their jurisdiction for their comments as well and forward such comments, if any to CMD-2 within the stipulated time as above.

Sd/-(Aditya Das) Scientist C

#### Head CMD-2 (Sd/-)

Circulated to: All ROs/BOs/TXD/MSD

**Copy to: ITS – for hosting on BIS Website** 

Annex A DOC: STI/11652/2 XXXX 2017

#### DRAFT

### SCHEME OF TESTING AND INSPECTION FOR CERTIFICATION OF

## TEXTILES- HIGH DENSITY POLYETHYLENE (HDPE)/POLYPROPYLENE (PP) WOVEN SACKS FOR PACKAGING OF 50 KG CEMENT ACCORDING TO IS 11652:2017

(Third Revision)

#### 1. LABORATORY

- 1.1 A laboratory shall be maintained, which shall be suitably equipped and staffed, where different tests given in the specification shall be carried out in accordance with the method given in the Indian Standard.
- **1.2** All testing equipments shall be periodically checked, verified and calibrated and records of such checks/verification/calibration shall be maintained.

#### 2. TEST RECORDS

- 2.1 All records of the tests as per this Scheme of Testing and Inspection shall be kept in suitable forms.
- 2.2 Copies of any such records that may be required by BIS shall be made available at any time on request.

#### 3. QUALITY CONTROL

- 3.1 It is recommended that, as far as possible, Statistical Quality Control (SQC) methods may be used for controlling the quality of the product during production as envisaged in this Scheme [See IS 397 (Various parts)].
- 3.2 In addition, efforts should be made to gradually introduce a Quality Management System in accordance with IS/ISO 9001.

#### 4. STANDARD MARK

4.1 The standard mark as given in column (1) of the First Schedule of the licence shall be printed using suitable inks by flexography or gravure printing or stenciling on each sack and bale of HDPE /PP woven sacks; as the case may be, provided always that sacks in each bale to which this mark is thus applied conforms to every requirement of the specification.

**Note:** The words "HDPE woven sack only" or "PP woven sack only" as applicable shall be printed beneath the standard mark conspicuously on each sack.

#### 5. MARKING

- **5.1** Each bale shall be legibly and indelibly marked with the following information:
  - a) Name and address of the manufacturer and trade mark, if any;
  - b) Type and size of sacks;
  - c) Number of sacks;
  - d) Gross weight;
  - e) Net weight;
  - f) Month and year of manufacture;
  - g) Identification mark;
  - h) Batch No.
  - i) Any other information as required by the law in force including recycling logo.
  - j) BIS Licence No. CM/L.....
  - k) BIS website details: www.bis.gov.in
- 5.2 In addition, each sack shall be compulsorily marked with visible recycling logo as given below at a space on bottom of the sack compatible with the art work of the buyer for printing the sack and on the bale.





- 6. PRINTING, PACKAGING AND MARKING
- **6.1 PRINTING ON SACKS** The printing on sacks shall meet the requirements as specified in Clause 6.1 of IS 11652:2017.
- **6.2 PACKAGING** The sacks shall be packed as per clause 6.2 of IS 11652:2017.

#### 7. LEVELS OF CONTROL

7.1 Inspection and tests at various levels of control specified in Table 1 shall be carried out on all quantities of High density polyethylene (HDPE) /polypropylene (PP) woven sacks for packaging of 50 kg cement intended to be covered under this scheme and appropriate records as per para 2 and charts as per para 3 of this STI shall be maintained. All production which conforms to the Indian Standard and covered by the licence shall be marked with BIS Standard Mark.

#### 8. CONTROL UNIT

**8.1** For the purpose of this scheme, HDPE/PP woven sacks having same construction/manufacturing particulars and manufactured in a day under similar conditions shall constitute a Control Unit.

#### 9. SAMPLING FOR FLOOR INSPECTION

**9.1** Sacks shall be selected during production from each a control unit and shall be tested as under:

Sl. No.	Characteristics	Sample	Frequency	Total No.
		Size		of
				Samples
1	Dimensions	5 sacks	Every 4 hours	30 sacks
2	Ends & Picks per dm	5 sacks	Every 4 hours	30 sacks
3	Breaking strength of	1 sack	One sample when control	05 sacks
	Fabric, top & bottom		unit starts and then at equal	
	seam strength, and		intervals of 2 hrs	
	elongation at break			
4	Sack	5 sacks	Every 4 hours	30 sacks
5	Mass of the sack	5 sacks	Every 4 hours	30 sacks

**Note: 1.** In case of any non-conformity, the production to be stopped, Root cause analysis to be carried out and corrective actions to be taken before resuming production.

- **9.2** In the event of failure of the sample in one or more of the requirements, the entire material in the control unit may be either reprocessed for rectifying the defect or rejected. Such reprocessed material when tested again shall conform to all the requirements of the specification.
- **9.2** Average mass of sack shall be calculated and recorded after selection of 5 sacks from every four hours of production subject to minimum 30 sacks per control unit.
- **9.3** A sample shall be drawn from each control unit and tested. It shall conform to all the requirements laid down in the specification.
- **9.4.** In respect of all other clauses of the specification, the factory will maintain appropriate controls and checks to ensure that their product conforms to all the requirements of the specification.

#### 10. RAW MATERIALS -

10.1 The raw material i.e. HDPE or PP used for manufacture of tape shall be virgin and conform to the requirements specified in IS 10146 or IS 10910 excluding overall migration and a proof of the same shall be maintained from the manufacturer/supplier.

- 10.2 The Fabric used in the manufacture of HDPE/PP Woven Sacks shall be woven as a tube on circular looms from HDPE/PP tapes having a width of 2.5 cm conforming to IS 6192 and IS 11197 respectively. The construction particulars of the fabric shall be as given in Table 1.
- **10.3** Sacks- The sacks shall be produced as per clause 4.3 of 11652:2017.
- **10.4** Seam The stitching shall be done as per clause. 4.4 of 11652:2017.
- **10.5** Lamination The lamination shall be done as per clause 4.5 of 11652:2017.
- **10.6** Valve for filling of sacks The valve shall be formed as per clause 4.7 of 11652:2017.
- **10.7** Conditioning of samples The specimens shall be conditions as per clasue 7 of IS 11652:2017.

#### 11. REJECTION

11.1 A separate record providing the detailed information regarding the rejected control unit and mode of their disposal shall be maintained. Such material shall in no case be stored together with that conforming to the specification.

#### 12. SAMPLES

12.1 The licensee shall supply, free of charge, the sample(s) required in accordance with the Bureau of Indian Standards (Certification) Regulations from the factory or godown. The BIS shall pay for the samples taken by it form the open market.

#### 13. REPLACEMENT

Whenever a complaint is received soon after the goods with Standard Mark have been purchased and used, and if there is adequate evidence that the goods have not been misused, defective goods or their components are replaced or repaired free of cost by the licensee in case the complaint is proved to be genuine and the warranty period (where applicable) has not expired. The final authority to judge the conformity of the product to the Indian Standard shall be with the Bureau.

In the event of any damages caused by the goods bearing the standard mark, or any claim being filed by the consumer against BIS Standard Mark and not "conforming to" the relevant Indian Standard, entire liability arising out of such non-conforming product shall be of the licensee and BIS shall not in any way be responsible in such cases.

#### 14. STOP MARKING

14.1 The marking of the product shall be stopped under intimation to the Bureau if, at any time, there is some difficulty in maintaining the conformity of the product to the specification, or the testing equipment goes out of order or due to any other reason. The marking may be resumed as soon as the defects are removed under to intimation to BIS.

The marking of the product shall be stopped immediately if directed to do so by BIS for any reason. The marking may then be resumed only after permission by BIS. The information regarding resumption of markings shall also be sent to BIS.

#### 15. PRODUCTION DATA

15.1 The licensee shall send to BIS a statement of quantity produced, marked and exported by him and the value thereof at the end of each operative year of the licence as per the enclosed proforma (Annex 1) which has to be authenticated by a Chartered Accountant.

# IS 11652:2017 TEXTILES- HIGH DENSITY POLYETHYLENE (HDPE)/POLYPROPYLENE (PP) WOVEN SACKS FOR PACKAGING OF 50 KG CEMENT Table 1 LEVELS OF CONTROL

(clause 7 of the Scheme of Testing and Inspection)

	TEST D	ETAILS	LEVELS OF CONTROL				
Clause	Requirement	Т	Test Method		Frequency	Remarks	
		Clause	Reference				
4.1	Raw Material (HDPE/PP granules)	4.1	IS 11652:2017	01	Each	One sample from each consignment shall be tested for ascertaining conformity to IS 10146 or IS 10910, excluding over all migration, unless the same is accompanied by test certificate from supplier.	
4.2	Fabric	4.2	IS 11652:2017 IS 6192 IS 11197	05	Every 4 hours production	Samples shall be drawn and tested at regular intervals to ascertain their conformity to requirements of Cl. 4.2	
4.3	Sack	4.3	IS 11652:2017	30 sacks	Each control unit	Also see clause 9.2 of STI	

4.4	Seam	4.3	IS 11652:2017	30 sacks	Each control unit	
4.4	Material used for stitching	4.4	IS 11652:2017 IS 10789	The material used for stitching shall be HDPE/PF having minimum 20 percent higher denier than the used in the fabric. Fibrillated thread or multifilities twisted yarn suitable for stitching may also be used stitching of UV stabilized sacks, the stitching material also be UV stabilized. The stitching shall be unwithout any missing stitch, loose thread or knot.		
4.5	Lamination	4.5	IS 11652:2017	-	-	As agreed to between buyer and the manufacturer.
4.6	Capacity	4.6	IS 11652:2017	02 sacks	Every hour	
4.7	Valve for filling of sacks	4.7	IS 11652:2017	30 sacks	Each control unit	
5.1	Mass of bale	5.1	IS 11652:2017	Each bale	Each bale	
5.6	UV resistance	Annex F	IS 11652:017	-	-	As agreed to between buyer and the seller.
6 & Table 1 i)	Dimensions  a) Inside length of sack (l) b) Width of sack(w) c) Width of gusset(e) d) Width of valve(v) e) Depth of valve (f).	Annex B	IS 11652:2017	30 sacks	Each control unit	See clause 9.1 of STI. Also see note given under Table 1 of IS 11652:2017

ii)	Ends per dm	Annex B	IS 11652:2017	30 sacks	Each control unit	
iii)	Picks per dm	Annex B	IS 11652:2017	30 sacks	Each control unit	
iv)	Mass of sack, a) Non-gusseted type b) Gusseted type		IS 1964	30 sacks	Each control unit	The mass of sack with dimensions other than those specified shall be calculated by the method given in Annex E
v)	Average breaking strength of fabric (Raveled strip method) b) Length wise a) Width wise		IS 1969 (Part 1)	5 sacks	Each control unit	Also see clause 9.1 of STI.
vi)	Breaking strength of top and bottom seam (Raveled strip method).		IS 9030	5 sacks	Each control unit	
vii)	Elongation at break of fabric (Ravelled strip method), percent:  a) Length wise b) Width wise		IS 1969 (Part 1)	5 sacks	Each control unit	
viii)	Drop impact strength	Annex C	IS 11652:2017	5 sacks	Each control unit	
ix)	Ash content, percent a)For UV stabilized sacks b)For non-UV stabilized sacks	Annex D	IS 11652:2017	2 sacks	Each control unit	

FORM I

**Material Specification (Size and dimensions)** 

Date Control Unit No.

Shift

Time:

Time Bag	Capacity	Inside Length	Inside Width	Ends/dm	Picks/dm	Mass of Sack(g)
No		(cm)	(cm)			Actual Bale Mass in (g)
1	2	3	4	5	6	7
1						1
2						2
3						3
4						4
30						30
AVG						

Range Capacity Length Width

#### **FORM II**

# TEXTILES- HIGH DENSITY POLYETHYLENE (HDPE)/POLYPROPYLENE (PP) WOVEN SACKS FOR PACKAGING OF 50 KG CEMENT

Material Specification	(Size and dimensions)
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Date Control Unit No.

Shift

Time:

Characteristic	1	2	3	4	5	Average	Range		
Average breaking stre	Average breaking strength of fabric								
a) Lengthwise									
b) Widthwise									
Breaking strength of	top seam a	nd bott	om sea	ım					
Elongation at break o	f fabric								
a) Lengthwise									
b) Widthwise									

## ANNEX I PROFORMA FOR OBTAINING PRODUCTION DETAILS

Period covered	
Name of Licensee	
CM/L No.	
Name of Articles (s)	IS No.
Grade/Type/Size/Variety/Class/Rating	
Brand/Trade/Name(s) of Product covered under BIS Certification Mark	
Total production of the articles(s) licensed for certification marking	
Total production of the article(s) conforming to Indian Standard	
Production covered with BIS Certification Mark and its Value:	
a) Quantity	
b) Value (Rs.)	
Brand Name used on production covered under BIS Certification Mark	
Calculation of marking fee on unit-rate basis; Marking Fee per unit	
a) Unit*	
b) Quantity covered with BIS Certification Mark	
<ul> <li>c) Marking fee rounded off in whole rupees as obtained by applying unit given in (b)</li> </ul>	rates given in (a) on quantity
Quantity not covered with BIS Certification Mark, if any.	
Reasons for such non-coverage	
Brand Name under which non-ISI goods were sold	
Quantity exported with BIS Standard Mark and its value	
Brand Name under which BIS Certified goods are exported	
Authentication by Chartered Accountant	

Note: In case a clause is not applicable, suitable remarks may be given against it.

<sup>\*</sup>Information to be filled up by BO before forwarding to the licensee.