केंद्रीय मुहर विभाग-2

संदर्भ: CMD-2/16: 11652

02-02-2018

विषय: IS 11652:2017 "50 किग्रा सीमेंट की भराई के लिए उचच घनत्व पोलीइथाइलीन (एच डी पी ई) पोलीप्रोपईलीन (पी पी) के बोरे" की एस टी आई (Doc: STI/11652/2 January 2018)

सक्षम प्राधिकारी ने IS 11652:2017 के अनुसार "50 किग्रा सीमेंट की भराई के लिए उचच घनत्व पोलीइथाइलीन (एच डी पी ई) पोलीप्रोपईलीन (पी पी) के बोरे″ की एस टी आई (Doc: STI/11652/2 January 2018) को अनुमोदित किया है।

सभी पक्षदारों को यह एस टी आई पहले संचालित दिशा निर्देश अनुसार अनुपालन हेतु अनुमोदित किया जाता है।

(आदित्य दास)

वैज्ञानिक सी

प्रमुख (CMD-2)

सभी क्षेत्रीय /शाखा कार्यालयों/TXD/LPPD को परिचालित

प्रतिलिपि: ITS इंट्रानेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT-2

Ref: CMD-2/16: 11652 02-02-2018

Subject: Revised STI (Doc: STI/11652/2 January 2018) for 'High Density Polyethylene (HDPE)/Polypropylene (PP) Woven Sacks for packaging of 50 Kg Cement' as per IS 11652:2017

Please find enclosed Revised STI (Doc: STI/11652/2 January 2018) for 'High Density Polyethylene (HDPE)/Polypropylene (PP) Woven Sacks for packaging of 50 Kg Cement' as per IS 11652:2017 which have been duly approved by Competent Authority for implementation as per guidelines circulated separately.

(Aditya Das) Scientist C

Head CMD-2

Circulated to all ROs/BOs/TXD/LPPD

Copy to: ITS for hosting on BIS website

DOC: STI/11652/2 Jan 2018

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

- 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.
- All testing equipments shall be periodically checked, verified and calibrated and records of such checks/verification/calibration shall be maintained.

2. TEST RECORDS

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

3. QUALITY CONTROL

- 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)].
- In addition, efforts should be made to gradually introduce a Quality Management System in accordance with IS/ISO 9001.

4. STANDARD MARK

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

- **51** 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
- 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

- **PRINTING ON SACKS** The printing on sacks shall meet the requirements as specified in Clause 6.1 of IS 11652:2017.
- **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

81 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.	Characteristics	Sample	Frequency	Total No.
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, Seam, Lamination	5 sacks	Every 4 hours	30 sacks
	(If required by the			
	buyer), Capacity and			
	Valve for filling of sacks			
5	Mass of the sack	5 sacks	Every 4 hours	30 sacks

Notes: 1 Each bundle, which is an intermediate packaging, normally contains 50 sacks. However, the number of sacks in each bundle may vary as per the customer's requirement.

- 2. 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.
- 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.
- **9.3.** In respect of all other clauses of the specification, the factory shall maintain appropriate controls and checks to ensure that their product conforms to all the requirements of the specification.

10. RAW MATERIALS -

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.

102 The Fabric used in the manufacture of HDPE/PP Woven Sacks shall meet the requirements specified in clause 4.2 of IS 11652:2017. The construction particulars of the fabric shall be as given in Table 1.

- **Sacks** The sacks shall be produced as per clause 4.3 of 11652:2017.
- **Seam** The stitching shall be done as per clause. 4.4 of 11652:2017.
- **Lamination** If required by the buyer, the lamination shall be done as per clause 4.5 of 11652:2017.
- **Valve for filling of sacks** The valve shall be formed as per clause 4.7 of 11652:2017.
- **107** Conditioning of samples The specimens shall be conditioned as per clause 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

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

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

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.

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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 DETAILS			LEVELS OF CONTROL			
Clause	Requirement	T	Test Method		Frequency	Remarks
		Clause	Reference]		
4.1	Raw Material (HDPE/PP granules)	4.1	IS 11652:2017	01	Each consignment	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 the requirements of Cl. 4.2
4.3	Sack	4.3	IS 11652:2017	30 sacks	Every 4 hours	Also see clause 9.1 of STI

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4.4	Seam	4.4	IS 11652:2017	30 sacks	Every 4 hours	Also see clause 9.1 of STI
4.4	Material used for stitching	4.4	IS 11652:2017 IS 10789	The material used for stitching shall be HDPE/PP tape having minimum 20 percent higher denier than the tapes used in the fabric. Fibrillated thread or multifilament twisted yarn suitable for stitching may also be used. For stitching of UV stabilized sacks, the stitching material shall also be UV stabilized. The stitching shall be uniform without any missing stitch, loose thread or knot.		
4.5	Lamination	4.5	IS 11652:2017	30 sacks	Every 4 hours	Applicable only if required by the buyer. Also see clause 9.1 of STI.
4.6	Capacity	4.6	IS 11652:2017	30 sacks	Every 4 hours	Also see clause 9.1 of STI.
4.7	Valve for filling of sacks	4.7	IS 11652:2017	30 sacks	Every 4 hours	Also see clause 9.1 of STI
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. Pl see note 1 below		
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	Also see clause 9.1 of STI
iii)	Picks per dm	Annex B	IS 11652:2017	30 sacks	Each control unit	Also see clause 9.1 of STI
iv)	Mass of sack, a) Non-gusseted type b) Gusseted type		IS 1964	30 sacks	Each control uni-t	The mass of sack with dimensions other than those specified shall be calculated by the method given in Annex E. Also see clause 9.1 of STI
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	-do-
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	-do-
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	

Note 1: For UV Resistance test which is to be done if agreed to between buyer and seller as per the IS, the agreement between buyer and seller for this test may specify the frequency of the test.

ANNEX I PROFORMA FOR OBTAINING PRODUCTION DETAILS

Period covered	
Name of Licensee	
CM/L No.	
NI CA (-)	IC N.
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	
c) Marking fee rounded off in whole rupees as obtained by applying unit given in (b)	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.

^{*}Information to be filled up by BO before forwarding to the licensee.