

केन्द्रीय मुहर विभाग-2

हमारा संदर्भ : सीएमडी-2/16:15298 (भाग 4)

13 04 2018

विषय : पुनरीक्षित आई एस 15298 (भाग 4):2017 "निजी सुरक्षा उपस्कर भाग 4 व्यवसाय मे पहनने के फुटवियर" (दूसरा पुनरीक्षण) की एसटीआई (डॉक:एसटीआई/15298(भाग 4)/2, अप्रैल 2018) और दिशा निर्देशों का कार्यान्वयन ।

यह उपर्युक्त विषय के संदर्भ में है

सक्षम प्राधिकारी ने आई एस 15298 (भाग 4):2017के अनुसार प्रमाणन हेतु पुनरीक्षित एसटीआई (डॉक: एसटीआई/15298(भाग 4)/2, अप्रैल 2018)और दिशा निर्देशों को अनुमोदित कर दिया है ।

सभी क्षेत्रीय और शाखा कार्यालयों से अनुरोध है कि वे उपरोक्त एसटीआई और दिशानिर्देशों का तत्काल प्रभाव से सुनिश्चित करें ।

अदाने खासी  
वैज्ञानिक (सी एम डी-2)

प्रमुख (सी एम डी-2)(हस्ता/-)

सभी क्षेत्रीय/शाखा कार्यालय/सीएचएडी/एमएसडी/प्रयोगशालाएं

आई टी एस विभाग - बीआईएस इंटरनेट पर डालने हेतु

Central Marks Department-2

Ref: CMD-2/16: 15298 (Part 4)

13 04 2018

**Subject: Guidelines for implementation of Revised IS 15298 (Part 4):2017 Personnel Protective Equipment Part 4 Occupational Footwear (Second Revision) and Revised STI Doc: 15298 (Part 4)/2 April 2018.**

This has reference to the subject mentioned above.

The Competent Authority has approved the Revised STI, Doc: 15298 (Part 4)/2 April 2018 and implementation guidelines for certification of the product as per IS 15298 (Part 4):2017.

All ROs/BOs are requested to ensure compliance of above STI and implementation guidelines with immediate effect.

AdaneKhrasi  
Scientist, C (CMD-2)

Head (CMD-2)(sd/-)

**Circulated to: All ROs/BOs/CHD/MSD/LABS**

**Copy to: ITS-for hosting on Intranet please**

**SCHEME OF TESTING AND INSPECTION  
FOR CERTIFICATION OF  
PERSONAL PROTECTIVE EQUIPMENT: PART 4 OCCUPATIONAL FOOTWEAR  
ACCORDING TO IS 15298 (Part 4):2017 / ISO 20347:2012  
(Second 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 equipment 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 stamped on each carton of the shoe pairs, provided that the personal protective equipment, occupational footwear to which this mark is thus applied conforms to every requirement of the specification.

## 5. MARKING

5.1 Each item of occupational footwear shall be clearly and permanently marked, e.g. by embossing or branding, with the following.

- a) Size;
- b) Manufacturer's identification mark;
- c) Manufacturer's type designation;
- d) Year and at least quarter of manufacture;
- e) Reference to this Indian Standard, i.e. IS 15298 (Part 4): 2017;
- f) Symbols(s) from Table 2 and Table 16 appropriate to the protection provided and/or, where applicable, the appropriate category (OB, O1 to O5), as described in Table 17;
- g) Each ball and each cup shall have the following information permanently and legibly marked on it as near as convenient to the ground portion.
  - 1) The size designation of joint, and
  - 2) Identification of the source of manufacture.

These inscriptions shall be employed whether the bulb and cups form integral parts of an apparatus, or supplied as individual items. When joints form parts of other apparatus, it is to be understood that this marking relates to the joint only and it should, therefore, be so placed as to be directly associated with the joint.

- h) BIS Licence No. CM/L.....
- i) BIS website details : [www.bis.gov.in](http://www.bis.gov.in)

Note: The marking for e) and f) should be adjacent to one another.

6. **PACKING** –The occupational footwear shall be packed as agreed to between the purchaser and the supplier.

6.1 Leaflet shall be supplied in the case of conductive footwear and Antistatic footwear worded as given in 8.2.1 for conductive footwear and 8.2.2 for Antistatic Footwear of IS 15298 (Pt 4):2017 / ISO 20347:2012.

## **7. LEVELS OF CONTROL**

- 7.1 The analysis and tests, as indicted in Table -1 and at the levels of control specified therein, shall be carried out on the whole production of the factory which is covered by this Scheme and appropriate records and charts maintained in accordance with item 2 above. All production, which conform to this Indian Standard and covered under the scope of this license shall be marked with the Standard Mark.

## **8. CONTROL UNIT**

- 8.1 For the purpose of this scheme, control unit shall be as follows:
- 8.2 10,000 pairs or Fortnight production of the occupational footwear whichever is earlier manufactured from the same consignment of the raw material.
- 8.3 On the basis of test result, the decision regarding conformity or otherwise of a control unit to a given requirement shall be made as follows:
- 8.4 No. of sample shall be drawn from each control unit and to be tested for all the requirements as specified in Table 1 of the scheme.
- 8.5 If the sample fails to conform in any of the requirements laid down in the specifications, such, entire control unit represented by the sample shall be considered unfit for the purpose of marking.

## **9. INSPECTION OF FINISHED PRODUCT**

- 9.1 **VISUAL DEFECTS, FINISH AND DIMENSIONS** – All finished occupational footwear shall be examined visually for surface defects, finish and dimensions. Only those shoe pairs, which are satisfactory in all respects, shall be considered acceptable.
- 9.2 In respect of all other clauses of the specification, the factory shall maintain appropriate controls and checks to ensure that their product conforms to be various requirements of the specifications.

## **10. RAW MATERIALS**

- 10.1 Raw Material used for Upper, Lining, Insole, Toe Cap, Sole etc. shall be of suitable quality so that occupational footwear shall confirm to IS 15298 (Part 4):2017/ISO 20347:2012.
- 10.2 In respect of all other clauses of the specification the factory will maintain appropriate controls and checks to ensure that their product conforms to the various requirement of the specification.

**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 from the open market.

**13. REPLACEMENT**

- 13.1 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.
- 13.2 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 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

Doc: STI /15298 (Part 4)/2  
April 2018

enclosed proforma (Annex 1) which has to be authenticated by a Chartered Accountant.

**IS 15298 (Part 4):2017/ISO 20347:2012**  
**(PERSONAL PROTECTIVE EQUIPMENT: PART 4 Occupational Footwear)**  
**Table 1 LEVELS OF CONTROL**  
**(Clause 7.0 of the Scheme of Testing and Inspection)**

TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirement	Test Method		No. of Sample	No. Of Test pieces from each sample	Frequency	Remarks
		Clause	Reference				
<b>5 &amp; Table 2</b>	<b>DESIGN</b>						
5.2.2	Height of upper	6.2	IS 15298 (Part 1)	1 pair from each of 3 sizes	1	Each control unit	
5.2.3	Seat Region	5.2.3	IS 15298 (Part 2)	-do-	-do-	-do-	
5.3	<b>WHOLE FOOTWEAR</b>						
5.3.1	<b>Sole Performance</b>						
5.3.1.1	Construction *	5.3.1.1	-do-	All		Each Control Unit	
5.3.1.2	Upper / Outsole bond strength *	5.2	IS 15298 (Part 1)	1 pair from each of 3 sizes	1	Each Control Unit	
<b>5.3.2</b>	<b>Leak Proofness**</b>	5.7	IS 15298 (Part 1)	2 pair from different sizes	1	Each Control Unit	
5.3.3	Specific ergonomic features	5.1	IS 15298 (Part 1)	3 pairs from 3 different sizes	1	Each Control Unit	
5.3.4	Slip Resistance	5.11.1	IS 15298 (Part 1)	-do-	-do-	-do-	
5.3.5	Innocuousness	5.3.5	IS 15298 (Part 4)	Each consignment of material received			Test method for testing of innocuousness is under preparation

**IS 15298 (Part 4):2017/ISO 20347:2012**  
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**Table 1 LEVELS OF CONTROL**  
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TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirement	Test Methods		No. of Samples	No. of Test pieces from each sample	Frequency	Remarks
		Clause	Reference				
<b>5.4</b>	<b>UPPER</b>						
5.4.1	General	5.4.1	IS 15298 (Part 4)	1 pair from each of 3 sizes	1	Each Control Unit	
5.4.2	Thickness **	6.1	IS 15298 (Part 1)	-do-	3	-do-	
5.4.3	Tear strength *	6.3	-do-	-do-	3	-do-	
5.4.4	Tensile properties	6.4	-do-	-do-	3	-do-	
5.4.5	Flexing resistance * *	6.5	-do-	-do-	1	-do-	
5.4.6	Water vapour permeability and co-efficient*	6.6 & 6.8	-do-	-do-	1	-do-	
5.4.7	pH value *	6.9	-do-	1	2	-do-	
5.4.8	Hydrolysis **	6.10	-do-	1 pair from each of 3 sizes	1	-do-	
5.4.9	Chromium VI content *	--	IS 582	1	2	-do-	



**IS 15298 (Part 4):2017/ISO 20347:2012**  
**(PERSONAL PROTECTIVE EQUIPMENT: PART 4 Occupational Footwear)**  
**Table 1 LEVELS OF CONTROL**  
**(Clause 7.0 of the Scheme of Testing and Inspection)**

TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirement	Test Methods		No. of Samples	No. of Test pieces from each sample	Frequency	Remarks
		Clause	Reference				
<b>5.5</b>	<b>Vamp Lining &amp; Quarter Lining</b>						
5.5 & 5.5.1	Tear strength	6.3	IS 15298 (Part 1)	1 pair from each of 3 sizes	3	Each control unit	For applicability of test, see clause 5.5 of table 2
5.5.2	Abrasion resistance	6.12	-do-	3	4	-do-	
5.5.3	Water vapour permeability and co-efficient	6.6 & 6.8	-do-	1 pair from each of 3 sizes	1	-do-	
5.5.4	pH value	6.9	-do-	1	2	-do-	
5.5.5	Chromium VI content	--	IS 582	1	2	-do-	
<b>5.6</b>	<b>TONGUE</b>						
5.6.1	Tear Strength	6.3	IS 15298 (Part 1)	1 pair from each of 3 sizes	3	-do-	For applicability of test, see clause 5.6 of table 2

IS 15298 (Part 4):2017/ISO 20347:2012

**(PERSONAL PROTECTIVE EQUIPMENT: PART 4 Occupational Footwear)**  
**Table 1 LEVELS OF CONTROL**  
**(Clause 7.0 of the Scheme of Testing and Inspection)**

TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirement	Test Methods		No. of Samples	No. of Test pieces from each sample	Frequency	Remarks
		Clause	Reference				
5.6.2	pH Value	6.9	IS 15298 (Part 1)	1	2	Each control unit	For applicability of test, see clause 5.6 of table 2
5.6.3	Chromium VI content	--	IS 582	-do-	2	-do-	
<b>5.7</b>	<b>INSOLE &amp; INSOCKS</b>						
5.7.1	Thickness	7.1	IS 15298 (Part 1)	3a	1	Each control unit	For applicability of test, see table 3
5.7.2	pH Value	6.9	-do-	1	2	-do-	
5.7.3	Water absorption and desorption	7.2	-do-	3a	1	-do-	
<b>5.7.4</b>	<b>Abrasion Resistance</b>						
5.7.4.1	Insoles	7.3	-do-	3a	1	-do-	
5.7.4.2	In socks	6.12	-do-	3	4	-do-	
5.7.5	Chromium VI content	---	IS 582	1	2	-do-	
<b>5.8</b>	<b>OUTSOLE</b>						
5.8.1	Design	5.8.1	IS 15298 (Part 4)				
5.8.1.1	Thickness		IS 15298 (Part 1)	1 pair from each of 3 sizes	1	Alternate control unit	
5.8.1.2	Cleated area	5.8.1.2	-do-	-do-	1	-do-	
5.8.1.3	Cleat height	8.1					
5.8.2	Tear strength	8.2	-do-	-do-	-do-	-do-	
5.8.3	Abrasion resistance	8.3	-do-	-do-	-do-	-do-	
5.8.4	Flexing Resistance	8.4	-do-	-do-	-do-	-do-	
5.8.5	Hydrolysis	8.5	-do-	-do-	-do-	-do-	
5.8.6	Interlayer Bond Strength	5.2	-do-	-do-	-do-	-do-	

a =if the samples are taken from footwear use 3 different sizes.

**IS 15298 (Part 4):2017/ISO 20347:2012**  
**(PERSONAL PROTECTIVE EQUIPMENT: PART 4 Occupational Footwear)**

**Table 1 LEVELS OF CONTROL**

**(Clause 7.0 of the Scheme of Testing and Inspection)**

**Additional Requirements for Special Applications with Appropriate Symbols for Marking**

TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirement	Test Methods		No. of Samples	No. of Test pieces from each sample	Frequency	Remarks
		Clause	Reference				
6 & Table 16	<b>WHOLE FOOTWEAR</b>						
6.2.1	Penetration Resistance	5.8.2, 5.8.3, 5.8.1, 5.9, 5.6.1,5.6.3	IS 15298 (Part 1)	1 pairs from each of 3 sizes	1 Pair	Alternate Control Unit	
6.2.1.5.2	Non-metallic inserts	6.4 & 7.4	EN 12568				
<b>6.2.2</b>	<b>Electrical Properties</b>						
6.2.2.1	Conductive footwear	5.10	IS 15298 (Part 1)	-do-	1 Pair	-do-	
6.2.2.2	Antistatic Footwear	5.10	-do-	-do-	1 Pair	-do-	
6.2.2.3	Electrically Insulating Footwear**	---	EN 50321	-do-	1 Pair	-do-	
<b>6.2.3</b>	<b>Resistance to inimical Environments</b>						
6.2.3.1	Heat Insulation of sole complex	5.12Annex-B	IS 15298 (Part 1)	2 pairs from different sizes	1 Pair	-do-	
6.2.3.2	Cold Insulation of sole complex	5.13	-do-	2 pairs from different sizes	1 Pair	-do-	
6.2.4	Energy absorption of seat region	5.14	-do-	1 pairs from each of 3 sizes	1 Pair	-do-	
6.2.5	Water resistance *	5.15.1 or 5.15.2	-do-	3 pairs (Min. 2 different sizes)	1 Pair	-do-	
6.2.6	Ankle protection	5.17	-do-	1 pairs from each of 3	1 Pair	-do-	
6.2.7	Cut resistance	6.2.7	IS 15298 (Part 4)	1 pairs from each of 3	1 Pair	Once in a month	

**IS 15298 (Part 4):2017/ISO 20347:2012**  
**(PERSONAL PROTECTIVE EQUIPMENT: PART 4 Occupational Footwear)**  
**Table 1 LEVELS OF CONTROL**  
**(Clause 7.0 of the Scheme of Testing and Inspection)**  
**Additional Requirements for Special Applications with Appropriate Symbols for Marking**

TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirement	Test Methods		No. of Samples	No. of Test pieces from each sample	Frequency	Remarks
		Clause	Reference				
<b>6.3</b>	<b>UPPER</b>						
	Water penetration and water absorption *	6.13	IS 15298 (Part 1)	3	1 Pair	Alternate Control Unit	
<b>6.4</b>	<b>OUTSOLE</b>						
6.4.1	Resistance to hot contact	8.7	-do-	1 pairs from each of 3sizes	1	-do-	
6.4.2	Resistance to fuel oil	8.6.1	-do-	1 pairs from each of 3sizes	1	-do-	

**Note:**

1. \* - Applicable only for classification I  
 \*\* - Applicable only for classification II  
 Absence of \* applicable to both classification I & II
2. Where samples are required from each of three sizes, these shall comprise the largest, the smallest and the middle sizes of the footwear undertest.
3. If one or two sizes are only manufactured in any particular control unit, then samples from the available sizes are to be tested.
4. If any sample of any size fails, the production of the particular control unit to be treated as fail.
5. If it is not possible to obtain a large enough test piece from the footwear, then a sample of the material from which the component has beenmanufactured may be used instead and this should be noted in the test report.

**ANNEX 1**  
**PROFORMA FOR OBTAINING PRODUCTION DETAILS**  
(Clause 14 of Scheme of Testing and Inspection)

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  c) Marking fee rounded off in whole rupees as obtained by applying unit rates given in (a) on quantity given in (b) <b>NOTE:</b> In case a clause is not applicable, suitable remarks may be given against it	
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	

**CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16:15298(Part 4)

11 04 2018

**Subject: Guidelines for implementation of Revised IS 15298 (Part 4):2017// ISO 20347:2012 “Personal Protective EquipmentPart 4 Occupational Footwear (Second Revision)”and revised STI Doc: STI/15298(Part 4)/2 April 2018.**

1. IS 15298 (Part 4):2010 has been revised as IS 15298 (Part 4):2017 and has been published and notified vide Gazette Notification S.O.2791 (E) dated 26 08 2017. The last date for implementation of the revised Standard is 05 08 2018 after which the old Standard shall stand withdrawn.
2. All BOs shall inform the Applicants and Licensees under their jurisdiction about the revised Standard.
3. The significant changes in the revised Standard as listed in the Table is given for the purpose of general guidance. BOs shall ensure that the product conforms to all the requirements, as applicable, as per the revised Standard.

<b>Clause</b>	<b>Requirement</b>
Cl.5.3.4	Requirement of slip resistance has been added.
Cl. 5.3.5	Requirement of Innocuousness has been added.
Cl. 5.5.2	Requirement of seat region lining abrasion resistance has been incorporated separately.
Cl.6.2.7, Table 16	Requirement of Cut resistance has been added

4. Consequent upon the issuance of the revised Standard, existing STI has been revised as **Doc: SIT/15298 (Part-4)/2April 2018.**
5. The guidelines for implementation of the revised Standard is given below:

**A. For Licensees:**

- (i) All Licensees shall switchover to the revised Standard by 05 08 2018. BOs shall ensure that no Licences are under operation as per the old Standard after 05 08 2018.
- (ii) Licensees shall confirm conformance to the additional/modified requirements through In-house/ Independent Test Reports or Test Certificates, as applicable. Verification of additional requirements and facilities, if any, may be done during the next surveillance visit.

(iii) BO may issue endorsement for the revised SIT after receipt of SIT Acceptance and the confirmation from the Licensee on implementation of the revised Standard. If the Licensee fails to complete all actions by 05 08 2018 it shall be dealt with as per OMPC.

**B. For Applicants:**

(i) Existing Applications where Sample has been submitted in the Laboratory/Test Report has been issued by the Laboratory may be processed as per the old Standard. However, if the Applicant is desirous of considering the Application as per the revised Standard, a declaration from the Applicant may be obtained to that effect and the Application may be processed accordingly. An undertaking from such Applicants shall also be obtained that if the sample fails in new test requirements, Licence will not be granted by BIS as per the old version.

(ii) Applications which are recorded henceforth may be processed as per the old Standard or the revised Standard. Processing of Applications as per old Standard shall be permitted only upto 05 08 2018 and for such cases Applicant shall give a declaration that they will switchover to revised Standard by 05 08 2018.

(iii) Beyond 05 08 2018 no Licence shall be granted as per the old Standard.

**C. For Inclusions:**

(i) For Inclusion of New Varieties, the relevant provisions as given above for Applicants shall apply.

(ii) However, processing of Inclusions as per the old Standard shall be permitted only upto the date of switchover to the revised Standard or upto 05 08 2018 whichever is earlier.

**6.** The above guidelines come into force with immediate effect.

(AdaneKhrasi)  
Sc. C (CMD-2)

**Sc.E (CG)(sd/-)**

**Head (CMD-2)(sd/-)**

**DDG (Certification)(sd/-)**