केन्द्रीय मुहर विभाग-2

हमारा संदर्भ : सीएमडी-2/16:15298(Part 4) **04 12 2018**

विषय : आईएस 15298(Part 4):2017 के संशोधन संख्या 1, सितंबर 2018 के अनुपालन के लिए दिशानिर्देश

इसे उपरोक्त विषय का संदर्भ प्राप्त है ।

सक्षम अधिकारी ने कार्यान्वयन के लिए दिशानिर्देशों को अनुमोदित कर दिया है ।

सभी क्षेत्रीय और शाखा कार्यालयों से अनुरोध है कि उपरोक्त दिशानिर्देश का अनुपालन तत्काल प्रभाव से सुनिश्चित करें ।

शौविक चंदा 04/12/2018
(शौविक चंदा)
वैज्ञानिक सी (सीएमडी-2)

प्रमुख सीएमडी-2
सभी क्षेत्रीय/शाखा कार्यालय/एफएडी/प्रयोगशालाओं को परिचालित
प्रतिलिपि : आईटीएस विभाग-बीआईएस इंट्रानेट पर डालने है ।

CENTRAL MARKS DPARTMENT-2

Our Ref: CMD-2/16:15298(Part 4) **04 12 2018**

Subject: SIT for implementation of IS 15298(Part 4):2017

This has reference to the subject mentioned above.

The Competent Authority has approved the SIT Doc. No. SIT/15298(Part 4)/1, November 2018 for implementation.

All ROs/BOs are required to ensure the implementation of the above guidelines with immediate effect.

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Circulated to All ROs/BOs/CMD/Labs
Copy to : ITS for hosting on Intranet

Doc: SIT/IS 15298 (Part 4)/1
November 2018

SCHEME OF INSPECTION AND TESTING FOR CERTIFICATION OF (PERSONAL PROTECTIVE EQUIPMENT: PART 4 Occupational Footwear) ACCORDING TO IS 15298 (Part 4):2017 (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 equipments shall be periodically checked, verified and calibrated and records of such checks/verification/calibration shall be maintained.

2. TEST RECORDS

2.1 The manufacturer shall maintain all test records as per this Scheme of Inspection and Testing for the tests carried out to establish conformity.

2.2 Copies of any such records that may be required by BIS shall be made available at any time on request.

3. PACKING AND MARKING

3.1 The standard mark as given in Schedule of the licence shall be printed using suitable inks by flexography or gravure printing or stenciling on each Personal Protective Equipment Part 4 Occupational Footwear 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.

3.2 Packing and Marking shall be done as per the provisions of the Indian Standard, provided always that the product thus marked conforms to all the requirements of the specification. In addition, details of BIS website shall be marked as follows: "For details of BIS certification please visit www.bis.gov.in". However, the marking for 'Reference to this International Standard, i.e ISO 20347:2011' and 'Symbols(s) from Table 2 and Table 16 appropriate to the protection provided and/or, where applicable, the appropriate category (OB,01 to 05), as described in Table 17' should be adjacent to one another.

3.3 The occupational footwear shall be packed as agreed to between the purchaser and the supplier.

3.4 Leaflet shall be supplied in the case of conductive footwear and Antistatic footwear worded as given in7.1 for conductive footwear and 7.2 for Antistatic Footwear of IS 15298 (Pt 4)/ISO 8782-4:1998.

4. CONTROL UNIT

4.1 For the purpose of this scheme, control unit shall be as follows:

4.2 10,000 pairs or Fortnight production of the occupational footwear whichever is earlier manufactured from the same consignment of the raw material.

4.3 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:

4.4 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.

4.5 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.

5. LEVELS OF CONTROL

5.1 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.

6. RAW MATERIALS

6.1 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):2002/ISO 8782-4:1998.

6.2 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.

7. REJECTION

7.1 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.

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)

(1)				(2)	(3)			(4)
Test Details				Test equipment requirement R:required (or) S: Sub-contracting permitted	Levels of Control			Remarks
Clause	Requirements	Test Method			No. of Samples	No. Of Test pieces from each sample	Frequency	
		Clause	Reference					
5&Table2	**DESIGN**						Each control unit	
5.2.2	Height of upper	6.2	IS 15298 (Part 1)	R	1 pair from each of 3 size	1	Each control unit	
5.2.3	Seat Region	5.2.3	IS 15298 (Part 2)	R	-do-	-do-		
5.3	**WHOLE FOOTWEAR**						-do-	
5.3.1	**Sole Performance**							
5.3.1.1	Construction *	5.3.1.1	-do-	R	All			
5.3.1.2	Upper / Outsole bond strength *	5.2	IS 15298 (Part 1)	R	1 pair from each of 3 sizes	1	Each Control Unit	
5.3.2	**Leak Proofness****	5.7	IS 15298 (Part 1)	R	2 pair from different sizes	1	Each Control Unit	
5.3.3	Specific ergonomic features	5.1	IS 15298 (Part 1)	R	3 pairs from 3 different sizes	1	Each Control Unit	

5.3.4	Slip Resistance	5.11.1	IS 15298 (Part 1)	S	-do-	-do-	Once a month	
5.3.5	Innocuousness	5.3.5	IS 15298 (Part 4)	R	Each consignment of material received			Test method for testing of innocuousness is under preparation
5.4	**UPPER**							
5.4.1	General	5.4.1	IS 15298 (Part 4)	R	1 pair from each	1	Each Control Unit	
5.4.2	Thickness **	6.1	IS 15298 (Part 1)	R	of 3 sizes			
5.4.3	Tear strength *	6.3	-do-	R	-do-	3	-do-	
5.4.4	Tensile properties	6.4	-do-	R	-do-	3	-do-	
5.4.5	Flexing resistance * *	6.5	-do-	R	-do-	3	-do-	
5.4.6	Water vapour permeability and co-efficient*	6.6 & 6.8	-do-	R	-do-	1	-do-	
5.4.7	pH value *	6.9	-do-	R				
5.4.8	Hydrolysis **	6.10	-do-	R	1	2	-do-	
5.4.9	Chromium VI content *	--	IS 582	R	1 pair from each of 3 sizes	1	-do-	
5.5	**Vamp Lining & Quarter Lining**							
5.5 & 5.5.1	Tear strength	6.3		R	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		R	3	4	-do-	
5.5.3	Water vapour permeability and co-efficient	6.6 & 6.8	-do-	R	1 pair from each of 3 sizes	1	-do-	
5.5.4	pH value	6.9		R	1	2	-do-	
5.5.5	Chromium VI content	--		R	1			
5.6	**TONGUE**					2	-do-	

5.6.1	Tear Strength	6.3		R	1 pair from each of 3 sizes	3	-do-	
5.6.2	pH Value	6.9	IS 15298 (Part 1)	R	1	2	Each control unit	For applicability of test, see clause 5.6 of table 2
5.6.3	Chromium VI content	--	IS 582	R	-do-	2	-do-	
5.7	**INSOLE & INSOCKS**							
5.7.1	Thickness	7.1	IS 15298 (Part 1)	R	3a	1	Each control unit	For applicability of test, see table 3
5.7.2	pH Value	6.9	-do-	R	1	2	-do-	
5.7.3	Water absorption and desorption	7.2	-do-	R	3a	1	-do-	
5.7.4	**Abrasion Resistance**							
5.7.4.1	Insoles	7.3	-do-	R	3a	1	-do-	
5.7.4.2	In socks	6.12	-do-	R	3	4	-do-	
5.7.5	Chromium VI content	---	IS 582	R	1	2	-do-	
5.8	**OUTSOLE**							
5.8.1	Design	5.8.1	IS 15298 (Part 4)	R				
5.8.1.1	Thickness		IS 15298 (Part 1)	R	1 pair from each of 3 sizes	1	Alternate control unit	
5.8.1.2	Cleated area	5.8.1.2	5.8.1.2	R	-do-	1	-do-	
5.8.1.3	Cleat height	8.1	-do-	R	-do-	1	-do-	
5.8.2	Tear strength	8.2	-do-	R	-do-	-do-	-do-	
5.8.3	Abrasion resistance	8.3	-do-	R	-do-	-do-	-do-	
5.8.4	Flexing Resistance	8.4	-do-	R	-do-	-do-	-do-	
5.8.5	Hydrolysis	8.5	-do-	R	-do-	-do-	-do-	
5.8.6	Interlayer Bond Strength	5.2	-do-	R	-do-	-do-	-do-	
6 & Table 16	**WHOLE FOOTWEAR**							

6.2.1 6.2.1.5.2	Penetration Resistance Non-metallic inserts	5.8.2, 5.8.3, 5.8.1, 5.9, 5.6.1,5.6.3 6.4 & 7.4	IS 15298 (Part 1) EN 12568	R	1 pairs from each of 3 sizes	1 Pair	Alternate Control Unit	
6.2.2	**Electrical Properties**							
6.2.2.1	Conductive footwear	5.10	IS 15298 (Part 1)	R	-do-	1 pair	-do-	
6.2.2.2	Antistatic Footwear	5.10	-do-	R	-do-	1 pair	-do-	
6.2.2.3	Electrically Insulating Footwear**	---	EN 50321	R	-do-	1 pair	-do-	
6.2.3	**Resistance to inimical Environments**							
6.2.3.1	Heat Insulation of sole complex	5.12 Annex- B	IS 15298 (Part 1)	R	2 pairs from different sizes	1 pair	-do-	
6.2.3.2	Cold Insulation of sole	5.13	-do-	R	2 pairs from different sizes	1 pair	-do-	
6.2.4	Energy absorption of seat region	5.14	-do-	R	2 pairs from different sizes	1 pair	-do-	
6.2.5	Water resistance *	5.15.1 or 5.15.2	-do-	R	3 pairs (Min. 2 different sizes)	1 pair	-do-	
6.2.6	Ankle protection	5.17	-do-	R	1 pairs from each of 3	1 pair	-do-	
6.2.7	Cut resistance	6.2.7	IS 15298 (Part 4)	R	1 pairs from each of 3		-do-	
6.3	**UPPER**						-do-	
	Water penetration and water absorption *	6.13	IS 15298 (Part 1)	R	3	1 pair	Alternate Control Unit	

6.4	**OUTSOLE**							
6.4.1	Resistance to hot contact	8.7	-do-	R	1 pairs from each of 3sizes	1	-do-	
6.4.2	Resistance to fuel oil	8.6.1	-do-	R	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 under test.
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 been manufactured may be used instead and this should be noted in the test report.