Doc: SIT/15462/1
June 2019

केन्द्रीय मुहर विभाग-2

हमारा संदर्भ: के मू वी-2/16: 15462 12 06 2019

विषय: संशोधित IS 15462:2019 की एस आई टी (Scheme of Inspection and Testing)

1. यह उपरोक्त विषय व 12 06 2019 को जारी किए गए कार्यान्वयन दिशा निर्देशों के संदर्भ मे है।

2. सक्षम अधिकारी द्वारा अनुमोदित संशोधित IS 15462:2019 की एस आई टी अनुपालन हेतु संलग्न है।

(आदित्य दास)
वैज्ञानिक सी

प्रमुख (के मू वी-2)

सभी क्षेत्रीय/शाखा कार्यालय

प्रतिलिपि :

आई टी एस विभाग – बी आई एस इंट्रानेट पर डालने हेतु

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:15462 12 06 2019

Subject: Scheme of Inspection and Testing (SIT) for Revised IS 15462:2019

1. This has reference to the above and further to the implementation guidelines issued on 12 06 2019.

2. Scheme of Inspection and Testing for Revised IS 15462:2019, duly approved by the CA, is enclosed for implementation.

(Aditya Das)
Scientist C

Head (CMD-2)

All ROs/BOs

Copy to:

ITSD - for hosting on BIS intranet

SCHEME OF INSPECTION AND TESTING FOR POLYMER MODIFIED BITUMEN (PMB) ACCORDING TO IS 15462:2019

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipments.

2. TEST RECORDS –The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING– The Standard Mark, as given in the Schedule of the licence, shall be printed on the container or the label applied to it, provided always that the product so marked conform to requirements of the specification.

3.1 Packing and Marking shall be done as per the requirements of the Indian Standard. In addition, the following details shall be mentioned:-

a) BIS Licence No. CM/L ----------.

b) BIS website details i.e. —"For details of BIS certification please visit www.bis.gov.in".

4. CONTROL UNIT – For the purpose of this scheme, the entire quantity of one category and grade of polymer modified bitumen manufactured a time shall be considered as one control unit.

4.1 The batch shall be considered fit for the purpose of marking if sample taken from control unit and tested as in Table 1 is found to conform to the relevant requirements of the specification.

4.2 In case the sample fails to conform to any of the requirements as laid down in the specification, the entire material in the batch shall be considered as unfit for the application of the Certification Mark of the Bureau. The batch could, however, be reprocessed and then retested for compliance with the specification.

4.3 Bitumen may be tested as per IS 73 or test certificate may be received from the supplier and appropriate records maintained. In respect of all other clauses for the specification, the factory will maintain appropriate controls and checks to ensure that their finished product conforms to the specification.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

7. REJECTIONS–Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1
LEVELS OF CONTROL

(1)				(2)	(3)		
Test Details				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	**Levels of Control**		
Cl.	Requirement	Test Methods			No. of Sample	Frequency	Remarks
		Clause Reference	IS				
6.1	Material and Manufacture	6.1	IS 15462: 2019	S	One	Each consignment	No further testing is required if test certificate from manufacturer is available
6.2	Homogeneity	6.2	-do-	R	One	-do-	
6.3	Mineral matter	6.3	-do-	R	One	-do-	
6.4	Degrading/separati of Modifier	6.4	-do-	R	One	-do-	
(A) Tests to be carried out on original binder							
i)	Softening point (R and B)	-	IS 1205	R	One	Each control unit	
ii)	Elastic recovery of half thread in ductilometer at 15°C	Annex A	IS 15462: 2019	R	One	-do-	
iii)	Flash point, COC	-	IS 1209	R	One	-do-	
iv)	Viscosity at 150°C	-	ASTM D 4402	R	One	-do-	
v)	Complex modulus (G*) divided by Sin delta (G*/sin δ) as *Min* 1.0 kPa, 25 mm Plate, 1 mm Gap, at 10 rad/s	Annex B	IS 15462: 2019	R	One	-do-	
vi)	Phase Angle (δ), degree,	Annex B	IS 15462:	R	One	-do-	

			2019				
vii)	Separation, difference in softening point (R&B),	Annex C	IS 15462: 2019	R	One	-do-	
viii)	FRAASS breaking point		IS 9831	R	One	-do-	FRAASS Breaking Point only to be evaluated in case the project site has subzero temp conditions
(B) Tests to be Carried out on Rolling Thin Film Oven (RTFO) Residue							
i)	Loss in mass		IS 9382	R	One	-do-	
ii)	Complex modulus (G*) divided by Sin delta (G*/sin δ)	Annex B	IS 15462: 2019	R	One	-do-	
iii)	MSCR TEST	Annex D	IS 15462: 2019	R	One	-do-	
(C) Tests to be Carried out on Pressure Aging Vessel (PAV) Residue							
i)	Complex modulus (G*) multiplied by Sin delta (G*sin δ)	Annex C	IS 15462: 2019	R	One	-do-	

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empaneled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval to BO Head.