

केन्द्रीय मुहर विभाग-2

हमारा संदर्भ: के मू वी-2/16:2932

16 01 2019

विषय: IS 2932:2013 की एस आई टी (Scheme of Inspection and Testing)

सक्षम अधिकारी द्वारा अनुमोदित IS 2932:2013 की एस आई टी अनुपालन हेतु संलग्न है।

(आदित्य दास)
वैज्ञानिक सी

प्रमुख (के मू वी-2)

सभी क्षेत्रीय/शाखा कार्यालय/सी एच डी

प्रतिलिपि :

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

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: 2932

16 01 2019

Subject: Scheme of Inspection and Testing (SIT) for IS 2932:2013

Scheme of Inspection and Testing for IS 2932:2013, duly approved by the CA, is enclosed for implementation.

(Aditya Das)
Scientist C

Head (CMD-2)

All ROs/BOs/CHD

Copy to:

ITSD - for hosting on BIS Intranet.

SCHEME OF INSPECTION AND TESTING

FOR ENAMEL, SYNTHETIC, EXTERIOR: (a) UNDERCOATING (b) FINISHING ACCORDING TO IS 2932:2013

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 license shall be printed on each container or on the label applied to the container; provided always that the material in each container on which this Mark is thus applied conforms to every requirement of the specification. Packing and Marking shall be done as per the requirements of the standard. In addition, the following details shall be marked on labels affixed to each container:

i) Licence No. (CM/L.....)

ii) BIS website details: 'For BIS certification details please visit www.bis.gov.in'

4. CONTROL UNIT – For the purpose of sampling, enamel of same colour and same class produced during a shift at one uniroll and thoroughly homogenized shall constitute a control unit.

4.1 On the basis of the tests on the samples drawn from a control unit, the conformity to the various requirements of the specification shall be made as follows

i) For the purpose of registration of the sample of the material the colour categories as prescribed in clause 5 of the Standard shall be employed.

ii) A sample drawn from a control unit shall be tested for its colour by matching it with a specified IS Colour or to an agreed colour where IS colour is not specified. In case of undercoating, the colour shall be of approximate match to the finishing enamel. If it fails to conform to the requirement, the control unit from which the sample is drawn shall be considered unfit for the purpose of marking.

iii) In addition to the test as given in para (ii) above, a sample taken from every control unit shall also be tested for its consistency, drying time, finish, resistance to acid and alkali (only finishing enamel)

iv) Two samples from every control unit shall also be tested for scratch hardness, flexibility & adhesion, and mass per ten litres. If any sample fails in respect of one or more of these requirements, the control unit represented by that sample shall be considered unfit for the purpose of marking.

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.

6. 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. Any rejected material which is potentially re-salable be sheared or cut or deformed in such a manner that it cannot be used for any other purpose except re-melting. A separate record shall be maintained giving information on quantity and cast number/coil number/control unit number, as applicable, relating to all such rejections/defective/sub-standard material of the production not conforming to the requirements of the Specification and the method of its disposal. Such material shall in no case be stored together with that conforming to the Specification. The Standard Mark (if already applied) on rejected material should be defaced.

TABLE 1 LEVELS OF CONTROL
(Para 5.0 of the scheme of testing and Inspection)

Control		Test Details			Levels of
Clause	Requirement	Test method Reference	Test equipment requirement R: required (or) S: Sub-contracting permitted	No. of Samples	Frequency
6.1	Composition		R		
6.1.1	i) General	IS 101(Part9/Sec2)		One	Each Control Unit
6.1.2	ii) Total Non-Volatile Content	IS 101(Part8/Sec2)		One	Each Control Unit
6.2	Condition in container		R		
6.2.1	a)At delivery	IS 2932:2013		One	Each Control Unit
6.2.2	During Storage	IS 101 (Part 6/Sec2)		One	Once in six month
6.3	Freedom from coarse particles	IS 101(Part1/Sec2)	R	One	Each Control Unit
6.4	Skin Formation	IS 101(Part1/Sec 2)	R	One	Each Control Unit
6.5	Thinning properties	IS 2923:2013	R	One	Each Control Unit
6.6	Application properties	IS 2923:2013	R	One	Each Control Unit

6.7	Durability (By accelerated weathering apparatus)	Annex C of IS 2932:2013	S	One	Once in a 6 months/subject to the change in composition
6.8	Lead restriction	IS 101(Part8/Sec5)	R	One	Each Control Unit
6.9 & Table 2 of IS 2932 : 2013	i) a) Consistency b) Viscosity	IS 101(Part1/Sec5)	R	One	Each Control Unit
	ii)Mass	IS 101(Part1/Sec7)	R	One	Each Control Unit
	iii)Drying time a)Surface dry b)Hard dry c)Tack dry	IS 101(Part3/Sec1)	R	One	Each Control Unit
	iv)a)Finish b)Gloss	IS101(Part3/Sec4) IS 101(Part4/Sec4)	R	One	Each Control Unit
	v)Fineness of Grind	IS101(Part3/Sec5)	R	One	Each Control Unit
	vi)Colour	IS101(Part4/Sec2)	R	One	Each Control Unit
	vii)Flexibility and adhesion a)Scratch Hardness b)Bend Test	IS101(Part5/Sec2) IS 101(Part5/Sec 2)	R	Two	Each Control Unit

	viii) Flash Point	IS 101(Part1/Sec 6)	R	One	Each consignment of thinner received
	ix) Composition		R		
	(a) Volume solids	IS 101(Part8/Sec 6)		One	Each Control Unit
	(b) Pthalic anhydride	IS 101(Part8/Sec 4)			
	x) Resistance to Acid	Annex E of IS 2932:2013	R	One	Each Control Unit
	xi) Resistance to Alkali	Annex F of IS 2932:2013	R	One	Each Control Unit
	xii) Accelerated storage stability	Annex G of IS 2932:2013	R	One	Each 10 th Control Unit
	xiii) keeping Properties	IS 101(Part6/Sec 2)	R	One	Each 10 th Control Unit
	xiv) Wet opacity		R		
	(To be read with clause 5 and table 1 of IS:2932)	IS 101(Part4/Sec 1)		One	Each Control Unit

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 to the Head BO.