### केन्द्रीय मुहर विभाग-2

#### हमारा संदर्भ : के.मु.वि.-2/16: 2074

30 07 2019

#### विषय: IS 2074:2015 (Ready Mixed Paint, Air Drying, Red Oxide, Zinc Chrome, Priming) का Scheme of Inspection and Testing (SIT)

- IS 2074:2015 (Ready Mixed Paint, Air Drying, Red Oxide, Zinc Chrome, Priming) का Scheme of Inspection and Testing (SIT) सक्षम प्राधिकारी द्वारा अनुमोदित किया गया है व अवलोकन हेतु संलग्न है।
- 2. सभी शाखा कार्यालयों से अनुरोध है की SIT, को अनुज्ञप्तिधारकों को 7 दिन के भीतर भेजें। SIT का 30 दिनों के भीतर अनुपालन किया जाना चाहिए।

(आदित्य दास) वैज्ञानिक सी (सी एम डी-2)

# <u>प्रमुख (के.मु.वि.-2)</u> सभी क्षेत्रीय/शाखा कार्यालयो/ सी एच डी/एलपिपिडी को इंट्रानेट के माध्यम से परिचालित

प्रतिलिपिः

# आई टी एस विभाग - बीआईएस इंट्रानेट पर अपलोड करने के लिए

#### **CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16: 2074

30 07 2019

# Subject: Scheme of Inspection and Testing (SIT) for IS 2074:2015 (Ready Mixed Paint, Air Drying, Red Oxide, Zinc Chrome, Priming)

- 1. Please find enclosed Scheme of Inspection and Testing (SIT) for IS 2074:2015 (Ready Mixed Paint, Air Drying, Red Oxide, Zinc Chrome, Priming) duly approved by the Competent Authority.
- 2. BOs are advised to send this SIT to all Licensees within 7 days. The SIT shall be implemented within 30 days.

(Aditya Das) Sc. 'C' (CMD-2)

Head (CMD-2)

Circulated to all ROs/BOs/CHD/LPPD

Copy to: ITS for hosting on BIS Intranet

#### SCHEME OF INSPECTION AND TESTING FOR READY MIXED PAINT, AIR DRYING, RED OXIDE, ZINC CHROME, PRIMING AS PER IS 2074:2015

**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 and 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.

3.1 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 this scheme, the entire quantity of the product produced in a batch mixer at a time shall constitute a control unit.

**5. LEVELS OF CONTROL-** The test and inspection as indicated 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 of testing and appropriate records and charts maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standard and covered by this license shall be marked with Certification Mark of the Bureau.

**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 and shall be made as per relevant provisions of the extant law for disposal of such products. A separate record shall be maintained giving information on quantity and control unit number, 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 (CI. 5 of Scheme of Inspection and Testing)

Test Detail (1)				(2)	Level of Control (3)		
5.1	Composition	5.1	IS 2074:2015	R	One	Every Fifth Control Unit	See Note 1
	Non-volatile Vehicle content (Applicable in defence supply)	-	IS 101(Pt8/Se c2)	R	One	-do-	
5.1.1	(a) Zinc chrome, % by mass	Annex B	-do-	R	One	-do-	
	(b) Synthetic red oxides of iron or natural red oxides of iron or a mixture of both which shall correspond to red oxide (as Fe2O3), % by mass	6	IS 6947(Pt 2)	R	One	-do-	
	(c) Suitable Extenders	-	-	R	One	-do-	
5.1.2	Volatile vehicle	5.1.2	IS 2074: 2015	R	One	Every Control unit	See Note 2
5.2	Suitability for use with oleo resinous synthetic and nitrocellulose based undercoats, surfaces, fillers and putty	5.2	IS 2074: 2015	R	One	-do-	-do-
5.3	Compatibility with Thinner	5.3	IS 2074:2015	R	One	-do-	-do-
5.4	Freedom from Objectionable Impurities	5.4	IS 2074:2015	R	One	-do-	-do-
5.5	Lead Restriction	-	IS 101(Pt 8/Sec 5)	R	One	-do-	-do-
5.6 & Table 1 i)	(a)Consistency	Annex C -	IS 2074:2015 IS 101(Part 1/Sec 5)	R	One	-do-	-do-

	(b) Viscosity by ford cup no. 4at 27±2°C		IS 101 (Pt 1.Sec 5)	R	One	-do-	-do-
ii)	Mass in kg /10 litre	-	IS 101(Pt 1/Sec 7)	R	One	Every control unit	-do-
iii)	Drying time,	-	IS 101 (Pt3/Sec1) 1986	R	One	-do-	-do-
a)	Surface dry		1000				
b)	Hard dry						
iv) a)	Finish	-	IS 101 (Pt.3/Sec 4)	R	One	-do-	-do-
b)	Gloss 60°		IS 101(Pt 4/Sec 4):88	R	One	-do-	-do-
V)	Fineness of grind,	-	IS 101(Pt.3/S ec 5)	R	One	-do-	-do-
vi)	Colour	-	IS 101(Pt 4/Sec 2):88	R	One	-do-	-do-
vii)	Flexibility and Adhesion						
a)	Bend test (with 6.25 mm dia mandrel and in type 1 apparatus)	Cl. 2	IS 101 (Pt.5/Sec2)	R	One	-do-	-do-
b)	Scratch hardness (load1000g)	Cl. 3	IS 101 (Pt 5/Sec2)	R	One	-do-	-do-
viii)	Flash point	-	IS 101 (Pt 1/Sec6)	R	One	-do-	-do-
ix)	Volume solids	-	IS 101(Pt 8/Sec 6)	R	One	-do-	-do-

x)	Resistance to humidity under condition of condensation:						
a)	Resistance to humidity	CI 2	IS 101 (Pt6/Sec1)	R	One	Every 10th Control Unit	See Note 3
b)	Resistance to sea water. (applicable for marine paints only)	Annex D	IS 2074:2015	R	One	-do-	-do-
c)	Resistance to saltspray	Annex E	IS 2074:2015	R	One	-do-	-do-
xi)	Accelerated storage stability test	Annex F	IS 2074 :2015	R	One	-do-	-do-
xii)	Keeping properties.		IS 101(Pt6/Se c 2)	R	One	-do-	-do-

Note 1: In case of failure of any sample in these requirements (every 5<sup>th</sup> control unit tests), that control unit shall be considered unfit for the purpose of marking. After taking needful corrective actions, sample from every subsequent control unit shall be tested and regular frequency (every five control units) shall be resumed only when samples from 2 consecutive control units pass.

Note 2: If any sample fails in these requirements (each control unit test), that control unit shall be considered unfit for the purpose of marking. After taking needful corrective actions, a sample shall be tested and marking shall be resumed only when this sample passes.

Note 3: If any sample fails in these requirements (every 10<sup>th</sup> control unit tests), that control unit shall be considered unfit for the purpose of marking. After taking needful corrective actions, sample from every subsequent control unit shall be tested and regular frequency shall be restored, only when samples from 5 consecutive control units pass.

Note 4: 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 5: 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.