केन्द्रीय मुहर विभाग-2

हमारा संदर्भ : के.मु.वि.-2/16: आई एस 16240

17 10 2018

विषय: आई एस 16240:2015 घरेलू उद्देश्ये के लिए रिवर्स ओसमोसीस (आर ओ) आधारित (पी ओ यू) पानी शोधकके अनुसार एस आई टी ।

आई एस 16240:2015 घरेलू उद्श्ये के लिए रिवर्स ओसमोसीस (आर ओ) आधारित (पी ओ यू) पानी शोधकके अन्सार एस आई टी संलग्न है।

(अरुण पुछकायला) वैज्ञानिक सी

प्रमुख (के.मु.वि.-2)(हस्ता/-)

सभी क्षेत्रीय/शाखा कार्यालयो/एफएडी/एलपीपीडी

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

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: IS16240

17 10 2018

Subject: Scheme of Inspection and Testing (SIT) for IS 16240:2015 "Reverse Osmosis (RO) Based Point-of-Use (PoU) Water Treatment system"

Please find enclosed Scheme of Inspection and Testing (SIT) for IS 16240:2015 "Reverse Osmosis (RO) Based Point-of-Use (PoU) Water Treatment system"

(Arun Pucchakayala) Scientist C

Head (CMD-2)(sd/-)

Circulated to all ROs/BOs/FAD/LPPD

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SCHEME OF INSPECTION AND TESTING FOR CERTIFICATION OF

Reverse Osmosis (RO) based point of Use (POU) Water Treatment System ACCORDING TO IS 16240:2015

- **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 equipment.
- **2. TEST RECORDS**—The manufacturer shall maintain test records for the tests carried out to establish conformity.
- **3. LABELLING AND MARKING** –The Standard Mark as given in Schedule of the license and Licence Number (i.e. CM/L.....) shall be incorporated, and the marking labelling and packing done as per the provisions of the Indian Standard, provided always that the product thus marked and packed conforms to all the requirement 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"
- **4. CONTROL UNIT** For the purpose of this scheme, all Water purifiers of the same capacity produced under similar conditions of manufacturing in a week shall constitute a control unit.
- **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. 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. The Standard Mark (if already applied) on rejected material should be defaced.

TABLE 1 LEVELS OF CONTROL

Reverse Osmosis (RO) based point of Use (POU) Water Treatment System IS 16240: 2015

(Clause 5 of Scheme of Inspection and Testing)

(1)				(2)	(3)		
Test Details				Test equipment	Levels of Control		
Cl.	Requirements	Test Methods		requirement	No. of	Frequency	Remarks
		Clause	Reference	R: required (or)S: Sub- contracting permitted	Sample		
5	Materials		- 1	31	- 1		
5.1	Materials in contact with water	5.1	IS 16240:2015 IS 9845	S	Each Consignment of material received		
5.2	Materials of Construction	5.2.1 5.2.2	IS 16240:2015	S	Each Consignment of material received		
5.3	Membrane Preservatives	5.3	IS 16240:2015	S	Shall be declared by the manufacturer in the user manual		
6	Performance Requirements						
6.2	Reject water control Mechanism	6.2.1	IS 16240:2015	R	One	Each Control Unit	
6.3.1	TDS reduction	6.3.1 6.3.2	IS 16240:2015 IS 10500 IS 3025(Part 16)	R	One	Each Control Unit	
6.3.3	Chemical Reduction						
	Arsenic	6.3.3& Table-1	IS 3025 (part 37)	S	One	Once in a 3 months	
	Cadmium		IS 3025 (part 41)	S	One	-do-	

TABLE 1 LEVELS OF CONTROL

Reverse Osmosis (RO) based point of Use (POU) Water Treatment System IS 16240: 2015

(Clause 5 of Scheme of Inspection and Testing)

(1)				(2)	(3)		
	Tes	t Details		Test equipment	Levels of Control		
Cl.	Requirements	Test Methods		requirement	No. of Sample	Frequency	Remarks
		Clause	Reference	R: required (or)S: Sub- contracting permitted			
	Chromium	6.3.3 & Table-1	IS 3025(part52)	S	One	Once in 3 months	
	Fluoride		IS 3025 (part 60)	S	One	-do-	
6.3.3	Lead		IS 3025 (part 47)	S	One	-do-	
0.5.5	Mercury		IS 3025 (part 48)	S	One	-do-	
	Pesticides total		IS 10500	S	One	-do-	
	Copper		IS 3025 (part 42)	R	One	Once in a Week	
	Iron		IS 3025 (part 53)	R	One	-do-	
	Nitrate		IS 3025 (part 34)	R	One	-do-	
6.3.4	Microbiological reduction						
	E.coli	6.3.4&Table-1	IS 10500	R	One	Each Control Unit	
	MS2 (Viruses)	-	IS 10500	S	One	Once in a 6 months	
	Cryptosporidium & Giardia lambia		IS 10500	S	-	equirements are kept in abeyance till the time boratory is identified or manufacturer developest facilities.	

TABLE 1 LEVELS OF CONTROL

$Reverse\ Osmosis\ (RO)\ based\ point\ of\ Use\ (POU)\ Water\ Treatment\ System$

IS 16240: 2015

(Clause 5 of Scheme of Inspection and Testing)

(1)				(2)	(3)			
	Test	Details		Test equipment	Levels of Control			
Cl.	Requirements	Test Methods		requirement	No. of Sample	Frequency	Remarks	
		Clause	Reference	R: required (or)S: Sub- contracting permitted				
6.4	Percent Recovery of product Water							
	Percent Recovery of product Water	6.4.1	IS 16240:2015	R	One	Each Control Unit		
	Hourly Production Rate	6.4.3	IS 16240:2015	R	One	-do-		
6.5	Electrical safety							
	Leakage current	6.5.1	IS 16240:2015 IS 302	R	Two	-do-		
	High voltage test	6.5.2	IS 16240:2015 IS 302	R	Three	-do-		
6.6	Power Supply	6.6	IS 16240:2015	R	Five	-do-		
6.7	Hydrostatic Test				•	<u>.</u>		
6.7.1, 6.7.2, 6.7.3	Type Pressure test(Hydrostatic test)	6.7.1 , 6.7.2 & 6.7.3	IS 16240:2015	R	Two	-do-		
7	Pneumatic test	7.2	IS 16240:2015	R	Five	-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 empanelled 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 by BO Head.