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उत्पाद मानुयल

LABORATORY GLASSWARE - TEST TUBES

IS 2618: 2016/ ISO 4142: 2002 के अनुसार

PRODUCT MANUAL FOR
LABORATORY GLASSWARE — TEST TUBES
ACCORDING TO IS 2618: 2016/ ISO 4142: 2002

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम की स्कीम -I के तहत यह उत्पाद मानुयल प्रमाणीकरण के प्रचलन में रीती और पारदर्शिता के सुसंगिता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाईसेंस धारियों द्वारा सन्दर्भ सामग्री के रूप में उपयोग किया जाएगा बीआईएस लाइसेंस/प्रमाण पत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification license/certificate.

1.	Product	: 2618: 2016/ ISO 4142: 2002
	Title	: LABORATORY GLASSWARE — TEST TUBES
	No. of Amendments	: Nil
2.	Sampling Guidelines:	
a)	Raw material	: Materials as specified in Cl 4 of the IS to be used in the manufacturing of different types of test tubes.
b)	Grouping guidelines	: Please refer ANNEX – A
c)	Sample Size	: 4 Nos
3.	List of Test Equipment	: Please refer ANNEX – B
4.	Scheme of Inspection and Testing	: Please refer ANNEX – C
5.	Possible tests in a day:	
	ALL	
6.	Scope of the Licence :	
	“Licence is granted to use Standard Mark as per IS 2618: 2016 with the following scope:	
	Name of the product	LABORATORY GLASSWARE — TEST TUBES
	Type	Type I/ Type II/ Type III
	Series	Series 1/ Series 2
	Nominal Size	Nominal Sizes to be mentioned
	Wall	Applicable for Type 1 and Type 3 Medium and/or Heavy (Type-I) Light and/or Medium (Type 3)

Annex-A
Grouping Guidelines

Following grouping guidelines shall be used for the purpose of GoL/ CSoL

Sample of minimum and maximum nominal sizes (for the range of sizes applied) from each Series and each Type to be tested to cover the size range of the series and types in the scope, and

- i. For type I
Samples of Heavy wall of the highest size may be tested to cover both heavy and medium wall of the sizes applied
- ii. For type III
Samples of medium wall of the highest size may be tested to cover both medium and light wall of the sizes applied

ANNEX B**List of Test Equipment**

Major test equipment required to test as per the Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Construction and Dimensions (Cl 5)	1) Vernier Caliper 2) Steel scale 3) Micrometer 4) Bore gauge

The above list is indicative only and may not be treated as exhaustive.

ANNEX C

Scheme of Inspection And Testing

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 and implement 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. PACKAGING AND MARKING: The Standard Mark as given in the Schedule of the license shall be marked on each test tube, provided that the test tube to which this mark is thus applied conforms to every requirement of the specification.

3.1 Packing and Marking shall be done as per provisions of IS 2618: 2016/ ISO 4142: 2002. In addition, the following details shall be marked on each test tube/package :-

- 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, Test Tubes of same Nominal Size, series, type and wall (as applicable) manufactured in one day from the same batch of raw material 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 Standard 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.

TABLE 1

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
4	Material	4	IS 2618: 2016/ ISO 4142: 2002	R	One	Each Consignment	No testing required if the consignment is ISI marked or accompanied with a test certificate
5	Construction and dimensions	5	-do-	R	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		

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 by BO Head.