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उत्पाद मैन्युअल
गर्म पानी की रबड़ की बोतलें
1867:2023 के अनुसार

Product Manual
Rubber Hot Water Bottles
According to IS 1867:2023

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो(अनुरूपता मूल्यांकन) विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	**मानक संख्या** **IS No.**	:	IS 1867:2023
	शीर्षक **Title**	:	Rubber Hot Water Bottles
	संशोधनों की संख्या **No. of amendments**	:	NIL
2.	**नमूना दिशानिर्देश** **Sampling Guidelines**		
a)	**कच्चा माल** **Raw material**	:	Cl 4.1.1 of IS 1867:2023. Rubber Washer as per Cl. 4.1.2 of IS 1867:2023. Stopper as per Cl. 4.1.3 of IS 1867:2023. Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be establishedduring Grant of Licence/Change in Scope of Licence/Factory Surveillance.
b)	**समूहीकरण दिशानिर्देश** **Grouping Guidelines**	:	All Sizes to be tested

c)	**नमूने का परिमाण** **Sample Quantity**	:	10 bottles Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (incase of market surveillance, effort may be made to procure therequired quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	**परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर** **Parameters to be Declared in Test Request**		Size and Capacity
3.	**परीक्षण उपकरणों की सूची** **List of Test Equipment**	:	Please refer ANNEX – A
4.	**निरीक्षण और परीक्षण की स्कीम** **Scheme of Inspection and Testing**	:	Please refer ANNEX – B
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**	:	All tests except Tensile Strength & Elongation – After Ageing (Cl 4.4.2), After Immersion (Cl 4.4.3), Tension Set (Cl 4.5) Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide readyreference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.
6.	**लाइसेंस का दायरा /** **Scope of the Licence:**	:	
	Licence is granted to use Standard Mark as per IS 1867:2023 with the following scope:		
	Name of the Product		Rubber Hot Water Bottles
	Size & Capacity		(Height x Width), Capacity

ANNEX – A

List of Test Equipment

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Test used in with clause reference	Test equipment list
1.	Cl 3.1 (Size)	- Steel Scale
2.	Cl 3.2 (Capacity)	- Arrangement for suspending the filled bottle in vertical position - Measuring Cylinder / Measuring Beaker
3.	Cl. 4.1.2 (Hardness of Rubber Washer)	- Hardness Tester - Hot Air Oven as per IS 3400 (Part 4) - Clock / Timer
4.	Cl 4.1.3 (Test for Stopper)	- Boiling Water - Sinker
5.	Cl. 4.2 (Thickness)	- Thickness Gauge of LC 0.1 mm or better
6.	Cl. 4.3 (Leakage Test)	- Arrangement for suspending the filled bottle by means of the eyelet - Glass Thermometer - Stop Watch - Flat Surface / Table - Load of 20 kg evenly distributed over the surface of the Bottle - Arrangement for inflating and maintaining the bottle with Air up to a pressure of 10kN/m^2 - Water Tank - Pressure Gauge
7.	Cl. 4.4 (Tensile Strength and Elongation at Break)	- Dumb-bell cutting arrangement with appropriate Dies - Thickness gauge - Tensile Testing Machine with Extensiometer as per IS 3400 (Part 1) - Steel Scale - Clock / Timer - Air Conditioner
8.	Cl. 4.5 (Tension Set)	- Tension Set test arrangement as per IS 3400(Part 13)

ANNEX B

Scheme of Inspection and Testing

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the differenttests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: **All Rubber Hot Water Bottles of same size and capacity manufactured in a day, shall constitute a control unit**. The manufacturer has the choice to define their own control unit/batch/lot and submit the same to the BIS.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommendedlevels of control are given in **Table 1**. Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan.

2. ENSURING COMPLIANCE THROUGH TESTING- manufacturers shall ensure compliance of their products to all the requirementsof the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred:

i) Shared testing resources like common facility,
ii) Cluster based testing facility,
iii) Sub-contracting to outside laboratories which may either be:
  a) BIS recognised/empanelled laboratories, or
  b) Any accredited laboratory as per ISO/IEC 17025

2.1 **TEST RECORDS**- The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on **each Rubber Hot Water Bottles** provided always that the **Rubber Hot Water Bottles** so marked conforms to each requirement of the specification. In addition, marking shall be done as per the Cl. 5.2 of **IS 1867:2023.**

3.1 Packing and Marking shall be done as per the Indian Standard.

4. REJECTION - The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. 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

(Recommended Levels of Control by BIS- For Guidance Only)

(1)				(3)		
Test Details				**Levels of Control**		
Cl.	**Requirement**	**Test Methods**		**No. of Sample**	**Frequency**	**Remarks**
		Clause	**Reference**			
4.1	Raw Materials – Rubber Washer & Stopper	4.1.2 & 4.1.3	IS 1867:2023	Each consignment of components received	Further testing is not required if supplied with Test certificate	
4.1	Workmanship	4.1.1	IS 1867:2023	Adequate inspection to ensure each item conforms to the standard.		
4.1	Construction	4.1.2	IS 1867:2023	Adequate inspection to ensure each item conforms to the standard.		
3.1	Size	3.1	IS 1867:2023	Three	Each Control Unit	
3.2	Capacity	3.2	IS 1867:2023	Three	Each Control Unit	
4.2	Thickness	4.2	IS 1867:2023	Three	Each Control Unit	
4.3.1	Leakage Test	4.3.1	IS 1867:2023	Three	Each Control Unit	
4.3.2	Leakage Test	4.3.2	IS 1867:2023	Each Unit		
4.4.1	Tensile Strength & Elongation at Break – Before Ageing	4.4.1	IS 1867:2023	One	Once in a month	
4.4.2	Tensile Strength & Elongation at Break – After Ageing	4.4.2	IS 1867:2023	One		
4.4.3	Tensile Strength & Elongation at Break – After Immersion	4.4.3	IS 1867:2023	One		
4.5	Tension Set	4.5	IS 1867:2023	One		