



उत्पाद मैनुअल

भा. मा. 17569: 2021 के अनुसार

भोजन भंडारण के लिए इंसुलेटेड कंटेनर के लिए

दस्तावेज संख्या-पी एम/आई एस 17569/5/ जनवरी 2026

भारतीय मानक ब्यूरो की स्कीम-1 (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारदर्शिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

**PRODUCT MANUAL FOR
INSULATED CONTAINERS FOR FOOD STORAGE
ACCORDING to IS 17569:2021**

Document No.- PM/ IS 17569/ 5/ January 2025

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 licence/certificate.

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INSULATED CONTAINERS FOR FOOD STORAGE ACCORDING TO IS 17569: 2021

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1.	Product	:	IS 17569: 2021
	Title	:	Insulated Containers For Food Storage
	No. of Amendments	:	Two
2.	Sampling Guidelines:		
a)	Raw material	:	• Welding electrode- Grade 308L as per IS 5856 • Inner container- Grade N1, N2 as per IS 15997 or IS 6911 or grade 304 series as per IS 5522 or IS 6911 or 316/316L as per IS 6911 • Outer Container and Lid, if of steel, - Grade N1, N2 as per IS 15997 or IS 6911 or grade 304 series as per IS 5522 or IS 6911 or 316/316L as per IS 6911 • Stainless Steel Rim of additional glass lid, if provided- Grade N1, N2 as per IS 15997 or IS 6911 or grade 304 series as per IS 5522 or IS 6911 or 316/316L as per IS 6911 • Safety Glass in glass lid, if provided- shall conform to the performance requirements given in IS 2347 • Stainless steel lid- Grade N1, N2 as per IS 15997 or IS 6911 or grade 304 series as per IS 5522 or IS 6911 or 316/316L as per IS 6911 • Material of internal utensils, if given with box- Grade 304 of IS 5522 or Grade N2 of IS 15997 • Other components as per Cl. 7.1 of IS 17569: 2021 <i>Material of plastic shall be declared and conformity to declaration shall be ensured through test certificate of supplier</i> <i>Material of insulation shall be declared and conformity to declaration shall be ensured through test certificate of supplier</i>
b)	Grouping guidelines	:	Please refer ANNEX –A
c)	Sample Size	:	8 Nos.

d)	Sampling Guidelines during surveillance		In addition to the sample of product drawn during factory surveillance, sample shall also be drawn for independent testing of chemical composition of raw material of inner container. The same shall also be specifically mentioned in the test request.
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	:	Capacity (Cl. 7.3), Drop impact (Cl. 7.6.1), Pendulum impact (Cl. 7.6.2), Strength of Handle (Cl. 7.7), Strength of shoulder strap (Cl. 7.8), Leakage test (Cl. 7.9), Joint leakage test (Cl. 7.10), Checking for PUF (Cl. 7.12), Seepage (Cl. 7.14), Length of Shoulder Strap (Cl. 7.13.1), Stability of flask (Cl. 7.13.2)
6.	Scope of the Licence:	:	Licence is granted to use Standard Mark as per IS 17569:2021 with the following scope:
	Name of product	:	Insulated Containers For Food Storage
	Type (<i>based on material</i>)		a. Plastic(or PET) on the outside and stainless-steel inside b. Stainless steel on both sides c. Plastic(or PET) on both sides d. Combination of materials as under a, b or c above (<i>combination to be specified for each such variety</i>) e. Lid or bottom container of material given in a, b, c or d above f. With Glass Lid with beading g. Hot/cold box with inserts (stainless steel utensils with stainless steel/plastic lid)
	Type (based on insulation type)		i) Vacuum insulated container ii) Thermal insulated container Type 1 iii) Thermal insulated container Type 2
	Type of usage	:	Table top/ Used for transportation
	Nominal Capacity	:	From.....ml to Up to and including....ml
	Whether leak-proof	:	Yes/No

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ANNEX- A**Grouping Guidelines**

1. For the purpose of certification, Insulated Containers for food storage use are classified as under:

Classification I: Type of Containers *(based on material)*:

- a. Plastic (or PET) on the outside and stainless-steel inside
- b. Stainless steel on both sides
- c. Plastic (or PET) on both sides
- d. Combination of materials as given in a, b or c above
- e. Lid or bottom container of material given in a, b, c or d above
- f. Lid can be of glass with beading (mainly stainless steel with or without silicone gasket; and
- g. Hot/cold box with inserts (stainless steel utensils with stainless steel/plastic lid)

Classification II: Type of Containers *(based on insulation type)*:

- i) Vacuum insulated container
- ii) Thermal insulated container Type 1
- iii) Thermal insulated container Type 2

Classification III: Nominal Capacities

Group	Nominal Capacity
Group 1	Upto 1 000 ml
Group 2	Above 1 000 ml and up to 5 000 ml
Group 3	Above 5 000 ml and up to 20 000 ml

Classification IV: Based on type of use

- Table top
 - Used for transportation
2. For covering all nominal capacities from a group in the scope of licence, the sample of the highest nominal capacities from each group (capacity wise, as above) for each type of containers (based on material, insulation type and type of usage), shall be tested separately for all requirements. Further, In addition to the sizes drawn for independent testing as per above guidelines, factory test report of all other sizes intended to be covered in scope shall also be submitted.
 3. Further, if manufacturer declares any variety to be leak-proof, the same shall be tested separately. If sample of leak-proof variety is tested and found passing, then variety without leak-proof may also be covered without separate testing.
 4. The Scope of Licence shall be restricted based on the Manufacturing and testing capabilities of the Manufacturer.
 5. During the operation of the licence, samples of all varieties covered in the scope of licence shall be drawn by rotation.

ANNEX B**List of Test Equipment**

Indicative list of major test equipment required to test as per the Indian Standard (For guidance only)

S.No.	Tests used in with Clause Reference	Test Equipment
1.	Minimum Thickness of Plastic as per Cl. 7.1.2.2 and Cl. 7.1.2.8, Outer Containers as per Cl 7.1.2.3, Rim and glass as per Cl. 7.1.2.4 and of utensils as per Cl. 7.1.2.9	• Vernier Calipers or Micrometer
2.	Coating Thickness as per Cl 7.1.2.1	• Coating Thickness Gauge
3.	Capacity as per Cl 7.3	• Measuring Jars (with adequate marking to measure the capacity of flasks to the maximum capacity)
4.	Heat Retention Capability as per Cl 7.4	• Hot Plate • Thermometer • Air Conditioner • Stopwatch • Torque Wrench
5.	Cold Retention Capability as per Cl 7.5	• Refrigerator • Thermometer • Air Conditioner • Stopwatch • Torque Wrench
6.	Drop Impact Test as per Cl 7.6.1	• Drop Impact Test Fixture
7.	Pendulum Impact Test as per Cl 7.6.2	• Pendulum Impact Test Fixture
8.	Fixing Strength of the Handle as per Cl 7.7	• Test Fixture • Weighing Balance • Steel balls for adequate loading • Counter
9.	Test for Strength of Shoulder Strap as per Cl 7.8	• Test Fixture as per Figure 2 • Weighing Balance • Steel balls for adequate loading • Stopwatch • Scale
10.	Leakage Test as per Cl 7.9	• Measuring Jars • Hot Plate • Thermometer • Surfactant

		• Torque Wrench • Stopwatch
11.	Joint Leak Test as per Cl 7.10 (For vacuum insulated containers made of stainless steel)	• Weighing Balance (Accuracy 10mg) • Water Bath/Tub
12.	Staining Test as per Cl 7.11 (For stainless steel only)	• Suitable Soapy Solution • Acetone/Methylated Spirit • Soft Cloth • Timer/Stopwatch • Thermostatically Controlled Tank -2 Nos. • Weighing Balance • Glacial Acetic Acid (99 percent) • Sodium Chloride • Distilled Water
13.	Seepage test as per Cl. 7.14	• Blue indelible ink • Scale
14.	Test for length of the shoulder cap as per Cl. 7.13.1	• Scale
15.	Stability of container as per Cl 7.13.2	• Plane Inclined at 10 degrees
16.	Test for leaching as per Cl.7.1.1, Annex C	Stimulants and instruments/equipment as per Annex C of IS 17569
17.	Sensorial test as per Cl. 7.1.1, Annex D	Stimulant as per Annex D of IS 17569
18.	Measurement of PUF density, Cl. 7.12, Annex-F	Weighing balance
19.	Tests for sticker, if used. Cl. 9.1	Test equipment, accessories as per Annex-G

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

ANNEX C**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 different tests 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 **Control Unit:** For the guidance of manufacturers, the recommended definition of Control Unit is quantity of all insulated containers of same Type, Nominal Capacity and Usage, manufactured by same method under similar conditions in a day.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels 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 requirements of 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.

2.2 TEST CERTIFICATE- Every sling or batch of slings shall be provided with a test certificate issued by the manufacturer as per Cl. 11 of IS 2762: 2009. A template of test certificate is given in **Appendix- 1**.

3. LABELLING AND MARKING - As per the requirement of IS 17569:2021. Additionally, in case the product is declared “leak-proof”, the same shall also be marked on product or package. The Standard Mark, as given in the Schedule of the licence, shall be marked on each insulated container provided always that the product thus marked conforms to all the requirement of the specification..

3.1 Additional Marking requirements: Additionally, the following shall also be marked on product or package :

- a) “For BIS certification details please visit www.bis.gov.in”

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- For guidance only)

Test Details (1)				Levels of Control (2)		
Clause	Requirements	Test Method		No. of Samples	Frequency	Remarks
		Clause	Reference			
5	Manufacture and Workmanship	5.1, 5.4	IS 17569	Manufacturer shall exercise adequate levels of control to ensure that entire production should conform to the Standard. Appropriate records of testing indicating conformity shall be maintained		
5.3	Welding Defects	5.3	IS 17569			
5.3	Welding Electrode	5.3	IS 17569 IS 5856	One	Each Consignment	No further testing is required if material is ISI marked.
7.1	Material	7.1	IS 17569 IS 15997 IS 5522 IS 3565 IS 6911	One	Each Consignment	No further testing is required in case received with test certificate or is ISI Marked. Material of plastic shall be declared and conformity to declaration shall be ensured through test certificate of supplier. Material of insulation shall be declared and conformity to declaration shall be ensured through test certificate of supplier.

7.1.2.2	Thickness of plastic	7.1.2.2	IS 17569	Three	Once in 3 months for every capacity	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass
7.1.2.3	Minimum Thickness of Outer Container	7.1.2.3	IS 17569	Three	Once in 3 months for every capacity	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass.
7.1.2.1	Coating Thickness	7.1.2.1 7.2	IS 17569 IS 9730	Three	Once in 3 months	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass. It shall be ensured that each variety produced in 3 months shall be tested at least once.
7.1.2.1	Salt Water Corrosion Test	7.1.2.1 7.4	IS 17569 IS 9730	Three	Once in 3 months	
7.1.2.1	Adhesion Test	7.1.2.1 7.5	IS 17569 IS 9730	Three	Once in 3 months	

7.1.2.1	Lead Limit	7.1.2.1 Table 1	IS 17569 IS 9806	Three	Once in 6 months	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass. It shall be ensured that each variety produced in 6 months shall be tested at least once.
7.1.2.1	Cadmium Limit	7.1.2.1 Table 1	IS 17569 IS 9806	Three	Once in 6 months	
7.1.2.5	Thickness of glass and stainless steel rim	7.1.2.5	IS 17569	Three	Once in 3 months for every capacity	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass It shall be ensured that each variety produced in 3 months shall be tested at least once.
7.1.2.7	Thickness of stainless steel lid	7.1.2.7	IS 17569	Three	Once in 3 months for every capacity	
7.3	Capacity	7.3	IS 17569	Three	Each Control Unit	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass.

7.4	Heat Retention Capability (1hour)	7.4 & Annex A	IS 17569	Three	Once in a month for each capacity and material	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass. It shall be ensured that each variety produced in a months shall be tested at least once.
7.4	Heat Retention Capability (6 hours & 12 hours)	7.4 & Annex A	IS 17569	Three	Once in a month for each capacity and material	
7.4	Heat Retention Capability (24 hours)	7.4 & Annex A	IS 17569	Three	Once in 3 months for each capacity and material	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass. It shall be ensured that each variety produced in one/three, as applicable months shall be tested at least once.
7.5	Cold Retention Capability	7.5 & Annex B	IS 17569	Three	Once in a month for each capacity and material	
7.6.1	Drop Impact	7.6.1	IS 17569	Three	Once in 3 months	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass One sample of each capacity produced in 3 months shall be tested In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass
7.6.2	Pendulum Impact	7.6.2	IS 17569	Three	Once in 3 months	
7.7	Fixing Strength of Handle	7.7	IS 17569	Three	Once in 3 months	
7.8	Test for Strength of Shoulder Strap	7.8	IS 17569	Three	Once in 3 months	

7.9	Leakage Test (<i>only if declared leak-free</i>)	7.9	IS 17569	Three	Each Control Unit	One sample of each capacity produced in 3 months shall be tested
7.10	Joint Leak Test	7.10	IS 17569	Three	Each Control Unit	
7.11	Staining Test	7.11	IS 17569	Three	Once in 3 months	
7.12	Checking of PUF insulation	7.12 Annex F	IS 17569	One	Once in 3 months	--
7.13.1	Length of the Shoulder Strap	7.13.1	IS 17569	Three	Each Control Unit	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass.
7.13.2	Stability of Flask	7.13.2	IS 17569	Three	Each Control Unit	
7.14	Seepage test	7.13	IS 17569	Three	Once in 3 months	In event of failure of even one of the 3 samples, additional 7 samples shall be tested and all of these shall pass. It shall be ensured that each variety produced in 3 months shall be tested at least once.
7.1	<i>Additional tests for Stainless Steel material made from grades N1, N2 of IS 15997/IS 6911</i>					
7.1	Test for leaching	Annex C	IS 17569	One	Once in 3 months	
7.1	Sensorial test	Annex D	IS 17569	One	Once in 3 months	
9.1	Tests for sticker, if used	Annex G	IS 17569	One	Once in 3 months	