



उत्पाद मैनुअल
आउटसोल के लिए माइक्रोसेल्यूलर रबड़ शीट
भारतीय मानक 6664: 2026 के अनुसार
PRODUCT MANUAL
FOR
MICROCELLULAR RUBBER SHEETS
FOR OUTSOLES
ACCORDING to IS 6664: 2026

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 6664: 2026
	शीर्षक Title	:	आउटसोल के लिए माइक्रोसेल्यूलर रबड़ शीट Microcellular Rubber Sheets for Outsoles.
	संशोधनों की संख्या No. of amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	The rubber used shall be compounded from natural or synthetic rubbers or their combination as per Cl 4.1. <i>Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/Factory Surveillance.</i>
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Not applicable.
c)	नमूने का परिमाण Sample Quantity	:	Sheet or cut sheet equivalent to 4 outsoles. Test pieces for physical tests to be provided as per Cl 7.2. <i>Note: This section indicates the quantity of the sample</i>

		<i>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 (in case of market surveillance, effort may be made to procure the required quantity of product sample, as far as possible since raw material sample may not be available in market)</i>
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	-- : <i>Note: Apart from the above, any other requirements/parameters may also be declared as per the standard, as applicable.</i>
3.	परीक्षण उपकरणों की सूची List of Test Equipment	: Please refer to Annex-A.
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	: Please refer to Annex-B.
5.	एक दिन में संभावित परीक्षण Possible tests in a day	
	Relative Density, Thickness and Split Tear Strength, Heat Shrinkage, Abrasion Resistance, Flexing Resistance (On pre-conditioned samples as applicable). <i>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 ready reference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.</i>	
6.	लाइसेंस का दायरा/Scope of the Licence:	
	“Licence is granted to use Standard Mark as per IS 6664: 2026 with the following scope:	
	Name of the product	Microcellular Rubber Sheets for Outsoles
	Grade / Type / Variety etc.	-

**BUREAU OF INDIAN STANDARDS
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ANNEX - A
LIST OF TEST EQUIPMENT
(INDICATIVE LIST, FOR GUIDANCE ONLY)

Clause no.	Parameter	Test Facilities
4.1.3, Table 1, Sl. No. i)	Relative Density	• Laboratory Balance • Accessories • Balance Pan Straddle • Sinker • Weight • Suitable Device to Suspend the Test Specimen • Distilled or Deionised Water • Cutter • Wetting Agent • Arrangement for Environment of $(23 \pm 2) ^\circ\text{C}$ • Vernier or Digital Calliper • Standard Laboratory Dial Thickness Gauge for Rubber
4.1.3, Table 1, Sl. No. ii)	Thickness	• Adequate instrument with 0.1 mm scale/graduation • Cutter
4.1.3, Table 1, Sl. No. iii)	Hardness	• Durometer, Type A with Presser foot and Indenter • Arrangement for $27 \pm 2^\circ\text{C}$ and relative humidity of 65 ± 5 percent
4.1.3, Table 1, Sl. No. iv)	Compression Set	• Dial Thickness Gauge as per D-1.3.1 of IS 10702 • Platen Press as per D-1.3.2 of IS 10702 • Rigid Spacer Plates • Rotating Circular Cutter • Arrangement for controlled environment of either $(23 \pm 2) ^\circ\text{C}$ or $(20 \pm 2) ^\circ\text{C}$ • Timer • Band Knife Splitter or a Surface Grinder - OR • Compression Apparatus as per D-2.1.1 of IS 10702 • Cutter • Timer • Arrangement for $27 ^\circ\text{C} \pm 2 ^\circ\text{C}$ and 65 percent ± 5 percent relative humidity • Thickness gauge with part-Spherical contact
4.5, Table 1, Sl. No. v)	Split Tear Strength	• Tensile Testing Machine • Cutter / Knife • Vernier Calliper
4.5, Table 1, Sl. No. vi)	Heat Shrinkage Test	• Cutter • Vernier Calliper • Timer • Arrangement for an atmosphere of 65 percent ± 2 percent relative humidity at a temperature of $27 ^\circ\text{C} \pm 2 ^\circ\text{C}$ • Heating Chamber

4.5, Table 1, Sl. No. vii)	Abrasion Resistance	• Arrangement for atmosphere of $(23 \pm 2) ^\circ\text{C}$ and $(50 \pm 5) \% \text{RH}$ • Timer • Abrasion Machine • Abrasive Sheet • Hollow Drill • Balance • Standard Reference Compounds
4.1.3, Table 1, Sl. No. viii)	Flexing resistance Ross Flex Method	• Ross Flexing Machine • Piercing Tool and Holder • Rule • Arrangement for Environment of $(23 \pm 2) ^\circ\text{C}$ • Timer

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

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 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 For the guidance of manufacturers, the recommended definition of control unit is: *All finished Microcellular Rubber Sheets for Outsoles produced in one day of the same thickness and moulded from the same type of rubber.*

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.

3. PACKING AND MARKING - The Standard Mark, as given in the Schedule of the licence, shall be incorporated legibly and indelibly on each Microcellular Rubber Sheet for Outsoles **and its packing**, provided always that the material so marked, conform to every requirement of the specification.

3.1 Packing and marking shall be done as per the provision of the Indian Standard.

3.2 **Additional Marking requirements:** Additionally, the following shall also be marked on each Microcellular Rubber Sheet for Outsoles **or its packaging**:

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.

5. Applicability of SIT for Small and Micro Enterprises (SMEs):

5.1 Compliance to the Scheme of Inspection and Testing is OPTIONAL for Micro, and Small Scale Units with respect to the requirements for Clause 1(Quality Assurance Plan), Clause 2 (Ensuring Compliance through Testing). However, ALL units shall ensure compliance of their products to the requirements of the Indian Standard.

5.2 The requirements of SIT with respect to Clause 3 (Packing and Marking) and Clause 4 (Rejection) shall be followed by all.

TABLE 1

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

(1)				(2)	
Test Details				Levels of Control	
Clause	Requirement	Test Methods		No. of Sample	Frequency
		Clause	Reference		
4.1 and 4.1.1	Material	4.1 and 4.1.2	IS 6664	Manufacturer shall ensure adequate inspection and in process control, to ensure product meets specified Dimensional requirements and maintain test records	
4.1.2	Colour and Design	4.1.2	IS 6664		
4.1.3 Table 1 Sl. No. i)	Relative Density	-	IS 10702	One	Each Control Unit
4.1.3 Table 1 Sl. No. ii)	Thickness	-	IS 15298 (Part 1)	Manufacturer shall ensure adequate inspection and in process control, to ensure product meets specified Dimensional requirements and maintain test records	
4.1.3 Table 1 Sl. No. iii)	Hardness	-	IS 12240 (Part 2)	One	Once a Month
4.1.3 Table 1 Sl. No. iv)	Compression Set	-	IS 10702	One	Once a Month
4.1.3 Table 1 Sl. No. v)	Split Tear Strength	Annex B	IS 6664	One	Each Control Unit
4.1.3 Table 1 Sl. No. vi)	Heat Shrinkage Test	Annex C	IS 6664	One	Once a Month
4.1.3 Table 1 Sl. No. vii)	Abrasion Resistance	-	IS 15298 (Part 1)	One	Once a Month
4.1.3 Table 1 Sl. No. viii)	Flexing resistance	-	IS 3400 (Part 16)	One	Once a Month