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उत्पाद मानुयल
Aluminium and Aluminium Alloy Bare Foil for Food Packaging
IS 15392:2003 के अनुसार

PRODUCT MANUAL FOR
Aluminium and Aluminium Alloy Bare Foil for Food Packaging
According to IS 15392:2003

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में अभ्यास और पारदर्शिता के संचालन में पारदर्शिता सुनिश्चित करने 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 लाइसेंस/प्रमाणपत्र 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 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.

1.	**उत्पाद** **Product**	:	IS 15392:2003
	शीर्षक **Title**	:	Aluminium and Aluminium ¬Alloy Bare Foil for Food Packaging
	सशोधन सख्या **No. of amendments**	:	**1**
2.	**नमूना दिशानिर्देश** **Sampling Guidelines**		
a)	कच्चा माल **Raw material**	:	Material shall conform to chemical composition of the Grades 19000, 19500, 19600,31000 or 40800 of IS 737.
b)	**समूहीकरण दिशानिर्देश** **Grouping Guidelines**	:	कृ पया Annex-A देखें Please see Annex-A
c)	नमूने का पररमाण **Sample Size**	:	1m X 2 Nos. (Physical) 5 pcs of 5 cm X 5 cm (chemical)

3.	परीक्षण उपकरणो की सूची **List of Test Equipment**	:	कृ पया Annex-B देखें Please refer Annex –B
4.	**निरीक्षण और परीक्षण की स्कीम** **Scheme of Inspection and Testing**	:	कृ पया Annex-C देखें Please refer Annex - C
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**	:	सभी परीक्षण All tests
6.	**लाइसेंस का दायरा /Scope of the Licence :**		
	Licence is granted to use Standard Mark as per IS 15392:2003 with the following scope:		
	उत्पाद का नाम **Name of the product**		Aluminium and Aluminium Alloy Bare Foil for Food Packaging
	Grade		40800,..
	Form of product		Coil/ Sheet
	Nominal Thickness		.. mm to .. mm,..
	width		.. mm to .. mm,..
	Surface Condition		Dry annealed A,..

ANNEX A

Grouping Guidelines

1. Grouping of Aluminium and Aluminium Alloy Bare Foil for Food Packaging as per IS 15392 is carried out on the basis of following:-

(i) Grade (as per IS 737)

(ii) Preferred Nominal Thickness:
11,12,14,16,18,20,22,25,28,30,35,40,45,50,60,70,75,80,90,100 µm

(iii) Surface Condition: (a) Dry Annealed (b) Slick Annealed

2. Accordingly, for the purpose of the GOL/ Change in scope of licence (CSoL) the product is grouped as under:

i. One sample each of highest and lowest thickness may be drawn and tested for a given grade (as per IS 737) of any form and given surface condition to cover all sizes of the grade of all forms and given surface condition i.e in order to cover the entire preferred nominal thickness range and both surface conditions i.e dry & slick annealed, samples of lowest and highest preferred nominal thickness has to be drawn separately for each surface condition for a given grade as per IS 737.

   For example, if sample of foil 11 µm & 30 µm of any surface condition i.e dry annealed A or dry annealed B or dry annealed C is tested for all the requirements of the specification, then foil of preferred nominal thickness from 11 µm up to and including 30 µm having surface finish dry annealed may be considered for grant of licence/inclusion.

3. While considering grant of licence/ inclusion of new varieties, it shall be ensured that the firm has necessary manufacturing and testing facilities for all the sizes proposed to be covered under the scope of BIS Certification.
4. During the operation of licence, BOs shall ensure testing of different thickness covered in the licence in rotation, so that all thickness is tested over a period of time.

ANNEX B

List of Test Equipment

Major test equipment required to test as per the Indian Standard

Sl. No	Test Equipment	Tests Used in with Clause reference of IS 15392
1	Digital Vernier Caliper, Steel Scale (1 metre), Thickness Gauge (flat anvil)	Dimensions and Tolerance (10 & 12)
2	Electronic weighing Balance	Average Thickness(11)
3	Perforation Counting Instrument	Pinhole Count (5)
4	UNIAXIAL TENSILE TESTING MACHINE	Tensile Properties (13)
5	Distilled water, Alcohol, Squeeze bottle, Volumetric cylinder	Surface Conditions (14)

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

ANNEXURE 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 equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING – The Standard Mark as given in Column (1) of the Schedule of the license and Licence Number (i.e. CM/L… .....) shall be marked on the foil package, provided always that the product thus marked conforms to all the requirement of the specification.

3.1 Each package of aluminium and aluminium alloy bare foil shall be marked with

i) Name of manufacturer
ii) Grade
iii) Condition of material
iv) Batch No.
v) Date of Manufacture
vi) Quantity in pcs or kg
vii) Nominal thickness
viii) Surface condition
ix) In addition, stencilled content or label affixed on top of package shall also contain the phrase 'Please visit www.bis.gov.in for BIS certification details'.

4. CONTROL UNIT – For the purpose of the Scheme of Inspection and Testing, all rolls/sheets of same grade, cast and processed to same dimensions & surface condition in a shift shall constitute one control unit.

5. LEVELS OF CONTROL – For the purpose of this scheme**,** manufacturers are classified into two categories:

i) **Rolling units** who make “jumbo” rolls/sheets by rolling process; and
ii) **Slitting units** who simply procure the ISI marked “jumbo” rolls/sheets from rolling units and cut (slit) them to the required sizes/quantities before dispatch.

5.1 **Rolling units**: 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 by rolling units.

5.2 **Slitting units**: Jumbo rolls/sheets, used for production of Aluminium foils, by slitting units shall be ISI marked and conforming to IS 15392. Records of all jumbo rolls received including the test certificate shall be maintained. The tests as indicated in column 1 of **Table 2** and the levels of control in column 3 of Table 2, 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 by rolling units.

6. TEST CERTIFICATE- For each consignment of BIS Certified material conforming to IS 15392:2003 and supplied in coils/sheets there shall be a test certificate which shall contain the Standard Mark, the cast/Control Unit number and the corresponding test results (as given in Annexure-I, enclosed).

7. 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 shall be maintained giving information on quantity and cast number/coil number/control unit number, as applicable, relating to all such rejections/defective/sub-standard material of the production not conforming to the requirements of the Specification and the method of its disposal. 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.

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TABLE 1: LEVELS OF CONTROL

ROLLING UNITS

(See para 5, and 5.1 of SIT)

(1)				(2)	(3)		
Test Details				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	**Levels of Control**		
Cl.	Requirement	Test Methods Clause Reference			No. of Sample	Frequency	Remarks
5	Pinhole count	5	IS 15392	R	One	Every 5th roll or sheet	
6	Freedom from defects	6	-do-	R	One	Every 5th roll or sheet	
7	Material	7.1, 7.2	-do-	S	One	Each consignment up to 4 tonnes	In case material is ISI marked or accompanied with supplier's test certificate or Test report from NABL Accredited lab indicating conformity, no testing is required
9	Lubricants	9.1	-do-	---	---	Each roll	---
		9.2, 9.3	-do-	---	---	Each consignment	Conformity of lubricants to the requirements of 9.2 and 9.3 may be established through a certificate from the lubricant supplier
12	Dimensions and Tolerances	12.1, 12.2, 12.3	-do-	R	Five	Each control unit	In case of failure of one or more samples, inspection should be done for all the rolls in control unit.

13	Tensile Properties	--	IS 12237	R	One	Each control unit	If any sample fails to comply with the requirements, two additional samples one from the same rolls/ sheets and one from other rolls/sheets shall be selected and tested. If both the samples pass the Control unit shall be accepted
14	Surface condition	14	IS 15392	R	Each roll/sheet		

TABLE 2: LEVELS OF CONTROL

SLITTING UNITS

(See para 5, and 5.2 of SIT)

(1)				(2)	(3)		
Test Details				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	**Levels of Control**		
Cl.	Requirement	Test Methods Clause Reference			No. of Sample	Frequency	Remarks
5	Pinhole count	5	IS 15392	R	One	Every 5th roll or sheet	
6	Freedom from defects	6	-do-	R	One	Every 5th roll or sheet	
7	Material	7.1, 7.2	-do-	Not applicable. No testing is required since input jumbo roll/sheet is ISI Marked			

9	Lubricants	9.1, 9.2, 9.3-	-do-	Each consignment of ISI marked jumbo rolls/sheets shall be received with a declaration from the manufacturer that the material supplied conforms to the requirements of Cl. 9			
12	Dimensions and Tolerances	12.1, 12.2, 12.3	-do-	R	Five	Each control unit	In case of failure of one or more samples, inspection should be done for all the rolls in control unit.
13	Tensile Properties	--	IS 12237	S	One	Every 10th control unit	If any sample fails to comply with the requirements, two additional samples one from the same rolls/ sheets and one from other rolls/sheets shall be selected and tested. If both the samples pass the Control unit shall be accepted
14	Surface condition	14	IS 15392	R	Each roll/sheet		

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: The control unit and levels of control as decided by the Bureau are obligatory to which the licensee shall comply with.

BIS STANDARD MARK

Annexure-I

(Para 6 of the Scheme of Inspection and Testing)

XYZ COMPANY

(Registered office Address and works address)

TEST CERTIFICATE FOR Aluminium and Aluminium Alloy Bare Foil For Food Packaging

TEST CERTIFICATE No._____ DATE_____

To

M/s_____

We certified that the material described below fully conforms to IS 15392:2003 Chemical composition and Physical properties of the product,
as tested in accordance with the Scheme of Inspection and Testing contained in the BIS Certification Marks LicenceNo.CM/L_____ are as indicated below against each order No.

(PLEASE REFER TO IS 15392:2003 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

Test Results

Order No and Date	Form	Batch /Control Unit number	Qty	Date of Mfg	Dimensions & Tolerances	Grade as per IS 737 (chemical composition)	Physical Properties		Remarks
							Breaking Load	Surface Condition	

Details of Jumbo Roll supplier: Name of Supplier, Qty, Control Unit No, Dimensions

REMARKS

FOR XYZ COMPANY

(It is suggested that size A4 paper be used for this test certificate)