www.bis.gov.in

उत्पाद मैन्युअल
सामान्य प्रयोजन के लिए पोलीइथाइलीन के थैले — विशिष्टि

IS 9738 : 2025 के अनुसार

PRODUCT MANUAL

Polyethylene Bags for General Purposes— Specification

ACCORDINGTO IS 9738 : 2025

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 9738 : 2025
	शीर्षक **Title**	:	Polyethylene Bags for General Purposes— Specification
	संशोधनों की संख्या **No. of amendments**	:	NIL
2.	**नमूना दिशानिर्देश** **Sampling Guidelines**		
a)	**कच्चा माल** **Raw material**	:	As per Cl 6 of IS 9738, Polyethylene films of LDPE, LLDPE, HDPE, HMHDPE and blends thereof
b)	**समूहीकरण दिशानिर्देश** **Grouping Guidelines**	:	*Please refer to Annex-A*
c)	**नमूने का परिमाण** **Sample Quantity**	:	30 Pc of Bags

d)	**परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर** **Parameters to be Declared in Test Request**		i) Name of Product ii) Material used for bags iii) Width and length iv) Thickness of film v) Class, Structure and Shape of bag vi) Use for General packaging/ Solid powder or granular
3.	**परीक्षण उपकरणों की सूची** **List of Test Equipment**	:	Please refer to Annex-B
4.	**निरीक्षण और परीक्षण की स्कीम** **Scheme of Inspection and Testing**	:	Please refer to Annex-C
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**		
	All tests are possible in a day		
6.	**लाइसेंस का दायरा /Scope of the Licence:**		

"Licence is granted to use Standard Mark as per IS 9738: 2025 with the following scope:

Name of the product	**Polyethylene Bags for General Purposes**
Material	LDPE and/or LLDPE and/or HDPE and/or HMHDPE and/or Blends (the blend to be specified)
Class and structure	a) Flat Bags – Bottom seal and/or side seal and/or bottom and centre seal and/or bottom seal and gusseted b) U-Shaped Bags- Gusseted
Thickness	120 micron upto ---- micron
Width (breadth) and length	Up to and including ------- mm
Use	General packaging/ Solid powder or granular

ANNEX-A
GROUPING GUIDELINES

The polyethylene bags can be classified as follows:

A. Classification based on Material:
   1. LDPE;
   2. LLDPE;
   3. HDPE;
   4. HMHDPE;
   5. Blends

B. Classification based on Class:
   1. Flat Bags
   2. U-Shaped Bags

C. Classification based on Structure
   1. Bottom seal
   2. side seal;
   3. bottom and centre seal;
   4. bottom seal and gusseted

D. Classification based on use:
   1. General packaging
   2. packing of solid powder or granular products,

E. Dimensions:

The length, width and thickness of the product are recommendatory in nature. The width and thickness of the product is dependent on the manufacturing capacity.

1. Polyethylene bags of each material and each class to be tested separately to be covered in the scope of licence.

2. Polyethylene bags of each structure from any applicable class and material may be tested to cover the structure across the material and class.

3. If sample of Polyethylene bags of a particular breadth (width) and Polyethylene bags of particular thickness from any material, class and structure is tested, then all bags with lower width and lower thickness may be covered in the scope across material, class and structure.

4. If sample for use in packing of solid powder or granular products, from any material, class, structure or dimension is tested, General packaging may also be included in the scope of Licence.

5. However, it shall be ensured that the manufacturer has got complete manufacturing as well as testing facilities for the sizes required to be covered in the scope of the licence.

6. During the operation of licences, samples of all varieties covered in the licence shall be drawn for testing in rotation.

7. Scope of licence shall be restricted based on the manufacturing and testing facilities available.

8. During operation of licence, samples of each variety covered in the scope of licence, shall be tested in rotation, to the extent possible.

ANNEX – B

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Tolerances of Dimensions 7.2	Scale upto max. dimension to be measured
2.	Tolerance on Nominal Thickness 7.3	Micrometer Least Count 0.01 mm
3.	Appearance 8.1	Visual
4.	Water Leak Test 8.2	– Water, – scale, – stop watch, – blotting paper
5.	Printing Ink Adhesion Test 8.3	25 mm wide transparent pressure sensitive tape or cello-tape, scale, stop watch,
6.	Drop Test 8.4 (Applicable for packing of solid powder or granular products	Product of packaging, arrangement for flat drop from a height of 1.2 m on a flat hard surface

ANNEX C

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Assurance Plan 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 defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 **RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT**:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: All the polyethylene bags of the same class, structure, use and dimension manufactured in a day shall constitute one control unit.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**.

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. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.

2.2.1 MSME manufacturers may utilize common cluster based facilities as per guidelines for the utilization of cluster based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 **Large Scale manufacturers shall maintain an in-house laboratory equipped at least withtest facilities for routine tests (indicated as "R" in Column 2 of Table 1)**, where different testsgiven in the specification shall be carried out in accordance with the method given in the specification**.** They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 **TEST RECORDS**- The manufacturers maintaining an in-house laboratory or utilizing common cluster based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratoryor any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be 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 bags of Polethylene bags provided always that the material so marked conforms to each requirement of the specification.

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

3.2 **Additional Marking requirements**: The material shall also be marked with the following additional requirement on each consumer pack of Polethylene bags:

a) "For BIS certification details please visit www.bis.gov.in"

4. REJECTION - All 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
(ONLY FOR GUIDANCE PURPOSE)

(1)				(2)	(3)		
Test Details				**Test equipment requirement R: required (or) S: Sub-contracting permitted**	**Levels of control**		
Cl.	**Requirements**	**Test Method Cl. Ref.**	**Test Method IS**		**No. of samples**	**Frequency**	**Remarks**
6.	Material	6.	IS 9738				Manufacturer Test Certificate shall be maintained with each procurement.
7.2	Tolerances of Dimensions	7.2	-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.		
7.3	Tolerance on Nominal Thickness	7.3	-do-	R			
8.1	Appearance	8.1	-do-	R			
8.2	Water Leak Test	8.2	-do-	R	One	Each control unit	
8.3	Printing Ink Adhesion Test	8.3	-do-	R	One	Each control unit	
8.4	Drop Test	8.4	-do-	R	One	Each control unit	Applicable on bags for packing of solid powder or granular products,