



उत्पाद मैनुअल
HIGH DENSITY POLYETHYLENE (HDPE) CRATES FOR MILK SATCHETS
IS 11584: 1986 के अनुसार

PRODUCT MANUAL
FOR HIGH DENSITY POLYETHYLENE (HDPE) CRATES FOR MILK SATCHETS
ACCORDING TO IS 11584: 1986

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 11584: 1986
	शीर्षक Title	:	High Density Polyethylene (HDPE) Crates for Milk Satchets
	संशोधनों की संख्या No. of amendments	:	4
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Material used shall meet the requirements as per Cl. 2.2 of IS11584: 1986
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Sample of crates of each Shape and Dimension, and Material Type to be tested separately. For adding Eco-mark in the scope of licence, sample(s) shall be tested for the additional requirements for Eco mark
c)	नमूने का आकार Sample Size	:	12 Pieces
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		
	(i) General Requirements as per Cl. 2.1 (ii) Shape and Dimensions as per Cl. 2.3 (iii) Mass as per Cl. 2.4 (iv) Appearance and Surface Finish as per Cl. 2.5 (v) Resistance to Stress as per Cl. 2.7 (vi) Resistance to Drop as per Cl. 2.9 (vii) Dimensional Stability as per Cl. 2.10		
6.	लाइसेंस का दायरा /Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 11584:1986 with the following scope:		
	Name of the product	High Density Polyethylene (HDPE) Crates for Milk Satchets	
	Size and capacity	Length x Breadth x Height	
	Shape & Design	As declared by the applicant	
	Additional Requirement	With or Without Eco mark	

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ANNEX-A

LIST OF TEST EQUIPMENTS

Major test equipment required to test as per the Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Shape and Dimensions Cl. 2.3	Measuring Tape Steel Scale Vernier Calliper Micrometer
2	Mass Cl. 2.4	Weighing Scale
3	Resistance to Stress Cl. 2.7	Stop Watch Air-circulated oven Surface active agent
4	Resistance to Applied Load Cl. 2.8	Measuring Tape Steel Scale Vernier Calliper Dummies to fill the crates with specified load capacity Stop Watch AC/ heaters for maintaining room temp at 27+/-1°C
5	Resistance to Drop Cl. 2.9	Dummies to fill the crates Apparatus to drop the crates from height of 0.7m and 3m Steel Plate inclined at 10 degrees Conditioning Chamber for maintaining temp. of 27+/-1°C and 5+/-1°C Stop Watch
6	Dimensional Stability Cl. 2.10	Measuring Tape Steel Scale Vernier Calliper Air-circulated oven Stop Watch

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

ANNEX B

SCHEME OF INSPECTION AND TESTING

1. **LABORATORY-** A laboratory shall be maintained, which shall be suitably equipped (as given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the method given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipment.

2. **TEST RECORD-** The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. **PACKING AND MARKING** - The Standard Mark as given in the Schedule of the licence shall be stenciled with indelible ink or printed on labels applied to the crates provided always that the material so marked conforms to each requirement of the specification.

3.2 The crates shall be packed as agreed to between the purchaser and the supplier. Each Crate shall bear legibly and indelibly the following information:

- a) Manufacturer's Name, initial/trade mark if any;
- b) Month and year of manufacture
- c) Batch No or Code No
- d) BIS licence number and "For BIS certification details please visit www.bis.gov.in"

5. **CONTROL UNIT-** For the purpose of this scheme, total quantity of HDPE crates for Milk Satchets of one size and type manufactured under identical conditions with same raw material in one day shall form one control unit

6. **LEVELS OF CONTROL:** - The tests as indicate in Table 1 and at the levels of controls in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and records maintained in accordance with paragraph 2 above.

6.1 All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark.

7. **REJECTION** - 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
LEVELS OF CONTROL

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
2.1	General Requirements	2.1	IS 11584	R	Each Piece	Each Piece	Please see Note 1
2.2	Material	6	IS 7328	S	One	Each Consignment of Raw Material	In case the consignment of raw material is ISI marked, no further testing is required.
2.3	Shape and Dimensions	2.3	IS 11584	R	Two Pieces	Each control unit	Please see Note 2
2.4	Mass	2.4	IS 11584	R	Each Piece	Each Piece	Please see Note 1
2.5	Appearance and Surface Finish	2.5	IS 11584	R	Each Piece	Each Piece	Please see Note 1
2.7	Resistance to Stress	Appendix A	IS 11584	R	One Piece	Each Control Unit	Please see Note 3
2.8	Resistance to Applied Load	Appendix B	IS 11584	R	One Piece	Once in a fortnight	Please see Note 4
2.9	Strength						
2.9.1	Resistance to	Appendix C-1	IS 11584	R	Three	Each Control	Please see Note 5

	drop at $27 \pm 1^{\circ}\text{C}$				Pieces	Unit	
2.9.2	Resistance to low temperature drop at $5 \pm 1^{\circ}\text{C}$	Appendix C-2	IS 11584	R	Three Pieces	Each Control Unit	Please see Note 5
2.10	Dimensional Stability	Appendix D	IS 11584	R	One Piece	Each Control Unit	Please see Note 3
3	Additional Requirements for Eco Mark	3.1, 3.2	IS 11584	S*	As agreed between purchaser and supplier		Testing required only if Eco mark is in scope of licence

Note-1: In case of failure of test piece in Clause 2.1 'General Requirements'/ 2.4 'Mass'/ 2.5 'Appearance and Surface Finish', that particular piece shall be rejected.

Note-2: In case of failure of both test pieces (in a control unit) in Clause 2.3 'Shape, Dimensions and Design', the whole control unit shall be rejected. In case of failure of any one of the two test pieces (in a control unit) in Clause 2.3 'Shape, Dimensions and Design', the number of samples shall be increased to double the size (i.e. four test pieces) and in case of any one of these four samples, the whole control unit shall be rejected.

Note-3: In case of failure of test piece (in a control unit) in Clause 2.7 'Resistance to Stress'/ Clause 2.10 'Dimensional Stability', the number of samples shall be increased to double the size (i.e. two test pieces) and in case of failure in any one of these two samples, the whole control unit shall be rejected.

Note-4: In case of failure of test piece in Clause 2.8 'Resistance to Applied Load', the number of samples shall be increased to double the size (i.e. two test pieces) and in case of failure in any one of these two samples, the whole control unit shall be rejected. In addition, in case of failure of test piece, the frequency should be increased to one per control unit. Further, frequency may be restored to once in a fortnight after passing four consecutive samples.

Note-5: In case of failure of two or more test pieces (in a control unit) in Clause 2.9.1 'Resistance to drop at $27 \pm 1^{\circ}\text{C}$ '/ Clause 2.9.2 'Resistance to low temperature drop at $5 \pm 1^{\circ}\text{C}$ ', the whole control unit shall be rejected. In case of failure of any one of the three test pieces (in a control unit) in Clause 2.9.1 'Resistance to drop at $27 \pm 1^{\circ}\text{C}$ '/ Clause 2.9.2 'Resistance to low temperature drop at $5 \pm 1^{\circ}\text{C}$ ', the number of samples shall be increased to double the size (i.e. six test pieces) and in case of failure in any one of these six samples, the whole control unit shall be rejected.

Note-6: 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-7: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification.