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Draft Indian Standard

**POLYETHYLENE TEREPHTHALATE (PET) BOTTLES FOR PACKAGING OF EDIBLE OILS –
SPECIFICATION**
*(First Revision of IS 12887)
(ICS 83.080.01)*

Plastics Packaging Sectional Committee,
PCD 21

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FOREWORD

(Formal clauses to be added later)

Polyethylene terephthalate (PET) containers are popular for the packaging of food including edible oil. Due to their glass-like clarity, lightweight and superior barrier properties against moisture and gas absorption, they have proved useful for food packaging applications. Containers such as bottles, produced using virgin PET are normally made without the use of any additives or plasticizers. As a result, there is no effect on the organoleptic quality of food packed in PET bottles. Use of PET bottles for packaging of edible oils has been permitted in IS 10171.

This Standard was originally published in 1989. This revision has been undertaken to incorporate editorial alignment and compliance with various applicable regulations. The major modifications in this revision are:

- requirement of material has been modified.
- recyclability and other requirements on plastics in compliance with the Plastic Waste Management Rules, 2016, as amended, have been included.
- the container shall be of any nominal capacity as has been provided by Legal Metrology (Packaged Commodity) Rules 2011 as amended by GSR 779(E) of 2nd Nov, 2021
- limits on specific migration as per Food Safety and Standards (Packaging) Regulation 2018 and its Amendments) have been incorporated
- the marking / labelling clause has been overhauled into marking / packing clause wherein the labelling requirements have been placed in accordance with the Food Safety and Standards (Labelling and Display) Regulation, 2020 and its Amendments.

Methods for all relevant tests for using PET bottles for packaging of edible oils have been elucidated in IS 2798.

Edible oils are presently packed in tin containers, blow-moulded HDPE containers and flexible pouches/packs. The Indian Standards published on the subjects are given in Annex E.

For the purpose of deciding whether a particular requirement of this Standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 2022 'Rules for rounding off numerical values (second revision)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1 SCOPE

This Standard prescribes the requirements and the methods of sampling and testing for polyethylene terephthalate (PET) bottles for packing up to 5 kg or 5 l edible oils.

2 REFERENCES

The standards listed in Annex A contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed in Annex A.

3 TERMINOLOGY

For the purpose of this standard, the definitions prescribed in IS 7408 (Part 1) shall apply.

4 MATERIAL

4.1 PET Bottles

The PET bottles shall comply with IS 12252 and IS 13193.

4.2 Closures

Closures includes caps and other attachments for ensuring closing of the bottles. The bottles shall be provided with a roll-on pilfer-proof (ROPP) cap which shall be made either of:

4.2.1 Aluminium: Aluminium closures shall be made of annealed aluminium sheets coated inside with food grade lacquering complying with IS 8970.

4.2.2 Plastic such as:

- High-Density Polyethylene (HDPE) complying with IS 7328.
- Polypropylene (PP) complying with IS 10951.

4.2.3 A Combination of plastics and metal can also be used. In such cases, the materials shall comply with **4.2.1** and **4.2.2**.

4.3 Wads

The wad, if required, shall be of cork board or pulpboard or any other suitable material compatible with the contents and suitable for food contact applications.

4.3 Labels

4.4.1 Labels Material may consist of one or more of the following materials:

4.4.1.1 Paper labels that may optionally be

- metallised
- coated with finishing chemicals
- coated with PE
- laminated with PP
- Any combination of the above

4.4.1.2 Self-adhesive plastic labels may be made of transparent or coloured Polypropylene (PP) that are suitable for flexography , rotogravure or screen printing.

4.4.2 As an alternative to labels, plastic sleeves made of plastics other than PVC may be used.

4.4.3 Printing inks and coating chemicals used shall comply with IS 15495 and shall be free from Bisphenol-A when tested as per ISO 18857 – 2.

4.4.4 Glue shall be non-toxic hot-melt or other adhesives that allows the label to be glued on the PET bottle during the entire shelf life. All glues shall be free from Bisphenol-A when tested as per ISO 18857 – 2.

4.5 Generic requirement for all materials in this standard shall comply with stipulations in Annex B.

4.6 All plastic materials shall comply with the stipulations of PWM Rules 2016, as amended, such as recyclability, incorporation of recycled content.

5 WORKMANSHIP AND FINISH

5.1 The bottles shall be transparent (even if coloured), free from any flash and scratches. The bottles and closures shall be manufactured in accordance with good manufacturing practices and shall be free from any burnt, oxidized or unhomogenised particles and undesirable odour. Secondary packaging made of either corrugated fibre-board boxes or shrink-wrap for empty PET bottles may be used to prevent any kind of scratches and contamination during handling and transportation.

6 SHAPE AND DIMENSIONS

6.1 The shape and design shall be as agreed to between the purchaser and the supplier.

6.2 Tolerance

The tolerances on the specified lateral dimensions, diameter(s) and overall height of the bottles shall be as under:

Up to and including 100 mm	± 1.5 mm
Over 100 mm and up to and including 200 mm	± 2.0 mm
Over 200 mm	± 2.5 mm

6.3 Wall Thickness

The minimum wall thickness of the bottles measured at any point by a dial calliper gauge fitted with spherical anvil, Vernier callipers or micro-meter shall be 0.25 mm. Mean of the three readings at any location shall be taken as the wall thickness at that point.

7 NECK FINISH

7.1 Neck finish for PET bottles with plastic closures:

7.1.1 Neck finishes for closures made of either HDPE or PP or its combination shall be 28/38 mm, 1031/47 mm, 1031/59 mm and 1040/58 mm.

7.2 Neck Finish for PET bottles with ROSPP closures:

7.2.1 The bottles shall be pilfer-proof having roll-on threads of the following neck finish sizes conforming to IS 7511 (Part 4):

31.5, 30, 28, 25, 22, and 20 mm.

7.2.2 The dimensions for all neck finish size other than 20 mm shall be as covered in IS 7511 (Part 4). Dimensional details for 20 mm neck size shall be as given hereunder Table 1.

Table 1 Dimensions of 20 mm ROSPP Neck Finish (in mm)
(Clause 7.2.2)

No. or Size	T		E		H		F		L		N	Angle	Thread Cutter Dia	Pitch
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

20	19.9 0	19.4 0	18.2 0	17.7 0	6.3 4	5.9 6	10.3 9	10.0 1	20.4 0	19.9 0	17.1 5	2.28	9.53	2.55
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NOTE — Column headings T, E, H, F, L & N are explained with illustrations in Table 1 of IS 7511 (Part 4).

8 CAPACITY (PACK SIZES)

8.1 Nominal Capacity

The bottles shall be of any nominal capacities as agreed to between the purchaser and the supplier.

8.2 Brimful Capacity

8.2.1 The brimful capacity of the container needs to be higher than the nominal capacity to ensure that no spillage occurs during filling, packing, transportation, storage, handling and usage. The brimful capacity shall be as agreed between the manufacturer and the purchaser.

8.2.2 The brimful capacity of bottles shall be measured by method prescribed in 5 of IS 2798.

8.2.3 The tolerances on the brimful capacities shall be as given in Table 2.

Table 2 Capacities and their tolerances

(Clause 8.2.3)

Sl. No.	Nominal Capacity, (ml)	Tolerance on brimful capacity, (ml)
(1)	(2)	(3)
i)	Upto 200	±3
ii)	201-500	±4
iii)	501-600	±5
iv)	601-750	±6
v)	751-1000	±7
vi)	1001-1500	±10
vii)	1501-1750	±15
viii)	Above 1750	±20

8.2.4 The brimful capacity shall exceed the nominal capacity as given in Annex B-2.1.

8.3 Fill Point Capacity

Tolerance for the fill point capacity (when determined by filling the bottles with water up to the specified depth measured from the top sealing surface) shall be as specified under clause 8.2. The fill point capacity when determined by filling the bottle with water up to the specified depth measured from the top sealing surface shall be below the minimum tolerance specified for brimful capacity.

9 MASS

The tolerance on the specified mass of the bottles with the closures (as agreed between purchaser and supplier) shall be ± 5 percent.

10 VERTICALITY

The variation in verticality when tested according to the method given in clause 7 of IS 2798 shall not be more than ± 1.5 mm.

11 PERFORMANCE TESTS

11.1 Closure Leakage Test

The bottles filled with water at ambient temperature and closed tightly with the closures when subjected to vibrations on a vibration table as detailed in 6 of IS 2798 for 1 h at a typical peak acceleration of 1 g shall not show any leakage through the closure nor any loss of tightness and backing-off or popping after 1 h of testing.

11.2 Drop Impact test

The bottles with the closures when subjected to the drop test according to 8 of IS 2798 shall not show any sign of cracking, nor shall it rupture, nor shall there be any leakage from the walls of the bottles. Slight de-shaping of the body shall not render the bottles unacceptable in the test.

11.3 Stack Load Test

The bottles shall not show any leakage, cracks or permanent buckling when subjected to test as described in **11.3.1**.

11.3.1 Arrange four bottles, filled with water at ambient temperature to their nominal capacity and closed with their closures to the normal torque on a flat level surface in a block of 2×2 without any other support. Apply a top load evenly distributed on a flat placed on the unsupported bottles and examine after 24 h. The total superimposed load (in N) on the flat surface shall be 0.4 times the numerical value of the nominal capacity of the bottles (in ml).

11.3.2 Since the nominal capacities can be of any value up to 5000 g or ml, the table below (Table 3) provides only illustrative cases.

Table 3 Stack loads to be used for testing of bottles of different capacities
(Clause 11.3.2)

Sl No.	Nominal Capacity (g or ml)	Stack Load for 4 bottles (N)	Load per Bottle (N)	Stack Load for 4 bottles (kgf)	Load per Bottle (kgf)
(1)	(2)	(3)	(4)	(3A)	(4A)
1	50	20	5	2.04	0.51
2	100	40	10	4.08	1.02
3	250	100	25	10.2	2.55
4	500	200	50	20.39	5.1
5	750	300	75	30.59	7.65
6	1000	400	100	40.79	10.2
7	1500	600	150	61.18	15.3
8	2000	800	200	81.58	20.39
9	3000	1200	300	122.37	30.59
10	4000	1600	400	163.16	40.79
11	5000	2000	500	203.95	50.99

NOTES — 1. Column (3A) and (4A) are derived by using conversion factor of $1 \text{ N} = 0.101972 \text{ kgf}$.
2. Units of measurement (N or kgf) to be decided between manufacturer and purchaser.

11.4 Storage Stability Test

This is a typical test for the determination of the composition of the edible oil upon storage.

11.4.1 The test conditions shall be both:

- at $(38 \pm 1)^\circ\text{C}$ and (90 ± 2) percent RH (accelerated condition); and
- at $(27 \pm 1)^\circ\text{C}$ and (65 ± 2) percent RH (standard condition).

11.4.2 Changes in following chemical parameters shall be determined :

- free fatty acid (as percentage of oleic acid);
- moisture content;
- peroxide value as milliequivalent of oxygen per kilo fat (wherever applicable); and
- rancidity as per IS 8639

11.4.3 Changes in above parameters (clause 11.4.2) shall be determined by the following measurements:

- at the initial stage;
- at the end of 60 days under accelerated condition; and
- at the end of 180 days when tested under standard condition.

11.4.4 The PET bottles shall be considered to have met the requirements of the test if the chemical parameters upon testing (*see 11.4.2*) comply with the permissible limits specified in the Indian Standards on the corresponding edible oils.

11.5 Migration Tests

11.5.1 Representative samples of bottles shall be subjected to overall and specific migration tests with simulant D (n-heptane) as specified in Table 1 (4.1 of IS 9845) as per temperature – time specified in Table 2 of 4.2 of IS 9845.

11.5.2 Determination of Overall Migration

The limit of overall migration when tested as prescribed in IS 9845 shall not exceed overall migration limit of 60 mg/kg or 10 mg/dm².

In the case of coloured plastic materials, colour migrated into the simulant shall not be apparent to the naked eye (*see IS 9833*). If the colour migrated is clearly visible, such materials are not suitable, even though the extractive value is within the overall migration limit.

11.5.3 Determination of Specific Migration

11.5.3.1 The specific migration is tested to determine the quantity of a specific substance that can migrate from a food packaging material or food container into food. Specific migration limits are usually expressed as mg/kg food.

11.5.3.2 The selection of simulants and procedure for sample preparation shall be as per IS 9845.

11.5.3.3 The test methods and limits of migration in the simulant for the specified substances shall be as per Table 4 hereunder.

Table 4 Specific Migration Limits
(Clause 11.5.3.3)

Sl No.	Toxic Substances	Migration Limit, <i>Maximum</i> , mg/kg	Test Method
(1)	(2)	(3)	(4)
i)	Barium	1.0	IS 3025(Part 2)
ii)	Cobalt	0.05	-do-
iii)	Copper	5.0	-do-
iv)	Iron	48.0	-do-
v)	Lithium	0.6	-do-
vi)	Manganese	0.6	-do-
vii)	Zinc	25.0	-do-
viii)	Antimony	0.04	-do-
ix)	Phthalic acid, bis(2-ethylhexyl)ester (DEHP)	1.5	ISO 18856

12 MARKING / PACKING

12.1 Each bottle shall be marked with:

- a) an identifier of its source (producer)
- b) name of material (PET) along with its recycling symbol (as required by IS 14534)



12.2 Each plastic closure shall be marked with:

- a) an identifier of its source (producer)
- b) name of material (HDPE/ PP) along with its recycling symbol (as required by IS 14534)



12.3 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

12.4 ECO- Mark

If compliant with the criteria stipulated in Annex C, the product may be marked with ECO-Mark.

12.5 Secondary packaging for bottles/closures

- a) Bottles, closures shall be packed in materials as agreed to between the buyer and supplier but devoid of any component having PVC.
- b) If any secondary packaging is of a plastic (non-PVC) then it shall comply with PWM Rules and their Amendments.
- c) Packing slip in each consignment shall include:
 - Nominal capacity (only for bottles) and
 - Batch No. or Code No. (for bottles and closures)
 - Quantity (for bottles and closures)

13 SAMPLING

13.1 Samples of bottles shall be drawn and the criteria for conformity determined as described in Annex D.

ANNEX A
(Clause 2)

<i>IS No.</i>	<i>Title</i>
IS 2798 : 1998	Methods of test for plastics containers (<i>first revision</i>)
IS 3025 (Part 2) : 2019 / ISO 11885 : 2007	Methods of sampling and test (physical and chemical) for water and wastewater : Part 2 Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES) (<i>first revision</i>)
IS 4905 : 2015 / ISO 24153 : 2009	Random sampling and randomization procedures (<i>first revision</i>)
IS 7328 : 2020	Specification for polyethylene material for moulding and extrusion (<i>third revision</i>)
IS 7408 (Part 1) : 2000	Blow moulded polyolefin containers — Specification : Part 1 Up to 5 litres capacity (<i>second revision</i>)
IS 7511 (Part 4) : 1986	Dimensions for neck finishes : Part 4 Roll-on threads pilferproof (<i>first revision</i>)
IS 8639 : 1977	Code for evaluation of the effect of packaging and storage on the sensory qualities of foods and beverages
IS 9833 : 2018	List of colourants for use in plastics in contact with foodstuffs and pharmaceuticals (<i>second revision</i>)
IS 9845 : 1998	Determination of overall migration of constituents of plastics materials and articles intended to come in contact with foodstuffs – Method of analysis (<i>second revision</i>)
IS 10142 : 1999	Polystyrene (Crystal and high impact) for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – Specification (<i>first revision</i>)
IS 10146 : 1982	Specification for polyethylene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 10151 : 2019	Polyvinyl Chloride (PVC) and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water — Specification (<i>first revision</i>)
IS 10910 : 1984	Specification for polypropylene and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 11434 : 2023	Ionomer resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water - Specification (<i>first revision</i>)
IS 11704 : 2023	Ethylene acrylic acid (EAA) copolymers for their safe use in contact with food-stuffs, pharmaceuticals and drinking water - Specification (<i>first revision</i>)
IS 12247 : 1988	Specification for Nylon-6 polymer for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 14534 : 2023	Plastics — Recovery and recycling of plastics waste - Guidelines (<i>second revision</i>)
IS 15495 : 2020	Printing ink for food packaging — Code of practice (<i>first revision</i>)
ISO 18856 : 2004	Water quality — Determination of selected phthalates using gas chromatography/mass spectrometry
ISO 18857 – 2 : 2009	Water quality – Determination of selected alkylphenols – Part 2: Gas chromatographic mass spectrometric determination of alkylphenols, their ethoxylates and bisphenol A in non-filtered samples following solid-phase extraction and derivatisation

ANNEX B
(Clause 4.5 and 8.2.4)

B-1 GENERIC REQUIREMENTS

B-1.1 Material Requirements

B-1.1.1 All components* that come in contact with the contents of the bottles (edible oil), shall be in compliance with appropriate Indian Standard for food contact materials (FCM) as available.

B-1.1.2 Approved quality of all components of the PET bottles shall be maintained by the supplier(s) in all subsequent supplies.

NOTE — * The term ‘components’ means PET bottles, its closures, wads, labels, etc. some of which may or may not come in contact with the contents.

B-2 BRIMFUL CAPACITY

B-2.1 The brimful capacity shall exceed the nominal capacity as follows:

- a) The permissible tolerance ($\pm X$) for the desired nominal capacity (N) as laid in Table 1 of Schedule I, Rule 2(e) of Legal Metrology (Packaged Commodity) Rules 2011 shall be noted.
- b) Next, the tolerance limits ($\pm Y$) for the brimful capacity shall be noted (Table 2 in 8.2.2).
- c) Thus, the minimum brimful capacity will be $(N + X + Y)$.
- d) The final brimful capacity (B) may have additional volume to fulfil additional requirements such as, but not limited to:
 - ensuring the contents remain below the brim when the filled open bottle is held by hand.
 - accommodating the properties of the content (e.g. specific gravity).
 - accommodating the wide variety possible in the container design and format.

B-2.2 Accordingly N and B shall be agreed to between the manufacturer and the purchaser.

ANNEX C
(Clause 12.4)

ADDITIONAL REQUIREMENTS FOR ECO-MARK

C-1 GENERAL REQUIREMENTS

C-1.1 All the packaging material/package manufactured shall meet relevant standards of BIS (Bureau of Indian Standards) pertaining to safety, quality, and performance wherever applicable.

C-1.2 The manufacturer of packaging material/package must produce the consent clearance as per the provisions of *Water (Prevention and Control of Pollution) Act, 1974* and *Air (Prevention and Control of Pollution) Act, 1981* along with the authorisation, if required, under the *Environment (Protection) Act, 1986* and the rules made thereunder to BIS while applying for ECO-Mark. Additionally, the manufacturer shall also comply with the provisions under prevention of *Food Adulteration Act, 1954* and rules made thereunder, wherever necessary.

C-1.3 The packaging material/package may display in brief the criteria based on which the product has been labelled as 'Environment Friendly'.

C-1.4 The packaging material/package may be sold along with instruction for proper use and mode of safe disposal so as to maximise product performance and minimise wastage.

C-1.5 It shall also be suitably mentioned that ECO-Mark label is applicable only to the packaging material/package if content is not separately covered under ECO-Mark. It may be stated that the ECO-Mark is applicable to the product or packaging material or both.

C-2 PRODUCT SPECIFIC REQUIREMENTS

C-2.1 The plastic packaging materials/packages used for packaging of food, pharmaceutical, cosmetics and drinking water shall comply with the relevant Indian standards and shall be manufactured from the plastics which shall comply with relevant Indian Standards.

NOTE — The manufacturer shall provide documentary evidence by way of certificate or declaration to this effect to Bureau of Indian Standards while applying for ECO-Mark.

ANNEX D
(Clause 13.1)
SAMPLING

D-1 SCALE OF SAMPLING

D-1.1 Lot

In any consignment all the bottles of the same material, nominal capacity and drawn from a single batch of manufacture shall be grouped together to constitute a lot.

D-1.2 Scale of Sampling

For ascertaining the conformity of the lot to the requirements of this standard, tests shall be carried out for each lot separately. The number of bottles to be sampled from a lot shall be in accordance with Table 5.

Table 5
(Clause D-1.2)
Scale of Sampling and Acceptance Number for below mentioned parameters

Lot size (No. of bottles)	For Workmanship and Finish		For Closure Leakage Test and Vibration Leakage Test		For Overall Height, Diameter, Wall Thickness and Verticality	
	Sample Size	Acceptance Number	Sample Size	Acceptance Number	Sample Size	Acceptance Number
(1)	(2)	(3)	(4)	(5)	(6)	(7)
up to 500	13	1	5	0	2	0
501 to 1000	20	2	8	0	2	0
1001 to 3000	32	3	13	0	2	0
3001 to 5000	50	5	20	1	3	0
5001 and above	80	7	32	2	5	0

NOTES:

1. "Acceptance Number" mentioned in Table 5 and in D-2.1 and D-2.4 refers to the number of acceptable failures for a given sample size.
2. For details on the significance of the columns and other parameters, paragraphs given in D-2 below may be referred.

D-1.3 The bottles shall be selected at random from the lot. To ensure the randomness of selection, methods given in IS 4905 may be followed.

D-2 CRITERIA FOR CONFORMITY

D-2.1 Visual Examination

The sample bottles selected as per col 2 of Table 5 shall be examined for workmanship and finish (5). Any bottle failing in one or more of the requirements shall be termed as defective. The lot shall be accepted under this head if the number of defective bottles in sample does not exceed the acceptance number given in col 3 of Table 5.

D-2.2 Overall Height, Diameter, Wall Thickness and Verticality

The sample size given in col 6 of Table 5 shall be used for the measurement of each of the parameters, namely, overall height, diameter, wall thickness and verticality. No failure shall occur for acceptance of the lot under this clause, col 7.

D-2.3 Bottle Mass, Brimful Capacity and Fill Point Capacity

For the purpose of the captioned tests, 5 bottles for lot size up to 5000 l and 10 bottles for lot size above 5000 l shall be selected at random from the samples already drawn according to D-1.3. Each of the sample bottles shall be subjected to tests for brimful capacity (8.2), fill point capacity (8.3) and bottle mass (9.1). There shall be no failure if the lot is to be accepted under these clauses.

D-2.4 Closure Leakage and Vibration Leakage

The number of sample bottles to be drawn shall be in accordance with col 4 of Table 5. Each of, the sample bottle shall be subjected to closure leakage test (11.1). The number of failures shall not exceed the acceptance number given in col 5 of Table 5.

D-2.5 Drop Impact Test and Stack Load Test

One set of sample bottles as given in their test methods (**11.2** and **11.3**) shall be drawn from the lot and these shall be subjected to the respective tests. The sample shall pass the tests for acceptance of the lot in respect of drop impact and stacking requirements.

D-2.6 Storage Stability Test

PET bottles shall be approved after testing the storage stability test (**11.4**) in the initial stage between the bottles manufacturer and the brand owner, subject to consistent supplies. These are type tests and are not routine tests.

D-2.7 Migration Tests

PET bottles shall be approved after testing the migration tests (**11.5**) in the initial stage between the bottle manufacturer and the brand owner, subject to consistent supplies. Thereafter these tests shall be performed every three years. This cycle of tests shall begin afresh, whenever there is a change in the material constituents of the bottles or the components thereof.

ANNEX E (Foreword)

<i>IS No.</i>	<i>Title</i>
IS 10325 : 2000	Square tins — 15 kg/litre for <i>ghee</i> , <i>vanaspati</i> , edible oils and bakery shortenings — Specification (<i>second revision</i>)
IS 10339 : 2000	<i>Ghee</i> , <i>vanaspati</i> , edible oils tins up to 10 kg/litre capacity — Specification (<i>second revision</i>)