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-IS 2346 (1992): Carbonated Beverages [FAD 14: Drinks and Carbonated Beverages]-
Indian Standard
CARBONATED BEVERAGES — SPECIFICATION
(Second Revision)

First Reprint JULY

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

December 1992  Price Group 3
AMENDMENT NO. 1 MAY 1996
TO
IS 2346 : 1992 CARBONATED BEVERAGES —
SPECIFICATION
(Second Revision)

(Foreword) — Insert the following matter before the last para:

'A scheme for labelling environment friendly products known as ECO-Mark has been introduced at the instance of the Ministry of Environment and Forests (MEF), Government of India. The ECO-Mark shall be administered by the Bureau of Indian Standards (BIS) under the BIS Act, 1986 as per the Resolution No. 71 dated 20 February 1991 and Resolution No. 425 dated 28 October 1992 published in the Gazette of the Government of India. For a product to be eligible for marking with the ECO-Mark it shall also carry the Standard Mark of BIS for quality besides meeting additional environment friendly (EF) requirements. The environment friendly requirements for carbonated beverages are, therefore, included through Amendment No. 1 to this standard.

This amendment is based on the Gazette Notification No. 624 (E) dated 6 September 1995 for Labelling Beverages, Infant Foods, Processed Fruits and Vegetable Products as environment friendly, published in the Gazette of the Government of India.'

(Page 2, clause 6.6) — Insert the following new matter after 6.6:

"6.7 Additional Requirements for ECO-Mark

6.7.1 General Requirements

6.7.1.1 The product shall conform to the requirements prescribed under clauses 6.1 to 6.6.

6.7.1.2 The manufacturer shall produce the consent clearance as per the provisions of Water (PCP) Act, 1974, Water (PCP) Cess Act, 1977 and Air (PCP) Act, 1981 along with the authorization if required under Environment (Protection) Act, 1986 and the Rules made thereunder to the Bureau of Indian Standards while applying for the ECO-Mark and the product shall also be in accordance with the Prevention of Food Adulteration Act, 1954 and the Rules made thereunder. Additionally, FPO 1955 (Fruit Product Order) framed under Essential Commodities Act, 1955, Standards of Weights and Measures Act, 1977 requirements wherever applicable has to be complied with.

1
6.7.1.3 The product/packaging may also display in brief the criteria based on which the product has been labelled environment friendly.

6.7.1.4 The material used for product packing shall be recyclable or biodegradable.

6.7.1.5 The date of manufacture and date of expiry shall be declared on the product package by the manufacturer.

6.7.1.6 The product shall be microbiologically safe when tested as per IS 5403 : 1969 ‘Method for yeast and mould count of foodstuffs’ and IS 5887 (Part 5) : 1976 ‘Methods for detection of bacteria responsible for food poisoning: Part 5 isolation, identification and enumeration of Vibrio Cholerae and Vibrio Parahaemolyticus (first revision)’ and shall be free from bacterial and fungal toxins.

6.7.1.7 The pesticide residues, if any in the product shall not exceed the limit as prescribed in PFA Act, 1954 and the Rules made thereunder.

6.7.1.8 The product/package or leaflet accompanying it may display instructions of proper use, storage and transport (including refrigeration temperature compliance) so as to maximize the product performance, safety and minimize wastage.

6.7.2 Specific Requirements

6.7.2.1 Arsenic content of the product shall not exceed 0.1 mg/kg when tested in accordance with the method given in IS 11124 : 1984 ‘Method for atomic absorption spectrophotometric determination of arsenic’.

6.7.2.2 The material used inside the metal cap of the product shall conform to the relevant Indian Standards of food grade plastics as permitted under the Prevention of Food Adulteration Act, 1954 and the Rules made thereunder. Caps and closures shall not be treated as labels.

6.7.2.3 The percentage of fruit juice/pulp, if any added shall be mentioned on the product/package.

6.7.2.4 No synthetic food colour and artificial sweetener shall be added or used in the product.”

(Page 2, clause 8) — Insert the following new clause after 8:

‘8.1 ECO-Mark
The product may also be marked with the ECO-Mark, the details of which may be obtained from the Bureau of Indian Standards.’

(FAD 14)
AMENDMENT NO. 2 MAY 1999
TO
IS 2346 : 1992 CARBONATED BEVERAGES —
SPECIFICATION
(Second Revision)

(Page 1, clauses 5.1.1 to 5.1.3) — Substitute the following for the existing:

'5.1.1 Sugar (see IS 1679)
5.1.2 Liquid Glucose (see IS 873)
5.1.3 Dextrose Monohydrate (see IS 874)'

(Page 1, clauses 5.1.7, 5.1.17, 5.1.18 and 5.1.23) — Substitute the following for the existing:

'5.1.7 Honey, Grade Special or A, (see IS 4941).
5.1.17 Edible Common Salt — Conforming to IS 253.
5.1.18 Caffeine — Conforming to IS 11911. Quantity of caffeine shall not be more than 200 mg/kg.

5.1.23 Carbon Dioxide — Conforming to Grade 2 of IS 307.'

(Page 2, clause 6.1) — Substitute ‘IS 5837’ for ‘IS 5837 : 1970’.

(Page 2, clause 6.5, line 2) — Substitute ‘IS 307’ for ‘IS 307 : 1966’.

(Page 2, clause 7.1, line 2) — Substitute ‘IS 1107’ for ‘IS 1107:1957’.

(Page 2, clause 7.2, line 3) — Substitute ‘IS 5837’ for ‘IS 5837 : 1970’.


(Page 3, clause 10.2, line 3) — Substitute ‘IS 1070’ for ‘IS 1070 : 1992’.
Amend No. 2 IS 2346 : 1992

(Page 3, Annex A) — Substitute IS No. and Title as under:

‘IS 874 : 1992 Dextrose monohydrate (third revision)’ for ‘IS 874 : 1975 Dextrose monohydrate (second revision)’,

‘IS 4941 : 1994 Extracted honey (second revision)’ for ‘IS 4941 : 1974 Extracted honey (first revision)’, and

‘IS 5345 : 1996 Sodium saccharin, food grade (second revision)’ for ‘IS 5345 : 1978 Sodium saccharin, food grade (first revision)’.

(Page 5, clause C.2.1, last sentence) — Substitute ‘Obtain the volume of gas from Table 2.’ for the existing.
AMENDMENT NO. 3 JUNE 2010
TO
IS 2346 : 1992 CARBONATED BEVERAGES — SPECIFICATION
(Second Revision)

[Page 3, clause 8(e)] — Substitute ‘Net quantity; and’ for ‘Net volume of content; and’.

[Page 3, clause 8(f)] — Substitute the following for the existing:


(FAD 14)
Reprography Unit, BIS, New Delhi, India
FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Drinks and Carbonated Beverages Sectional Committee had been approved by the Food and Agriculture Division Council.

In a tropical country like India, the carbonated beverages industry has an important place. The quality of a carbonated beverage depends on the quality of the various ingredients that go in its manufacture — water, acidulants, sweetening agents, emulsifiers and stabilizers, flavour, colour and carbon dioxide being the most important ones. The hygienic conditions of the units producing carbonated beverages also need vigilant control to safeguard public health.

This standard was originally issued in 1963 and then revised in 1973, in which maximum permissible limits of those ingredients which in excess could adversely affect human health were specified.

In this second revision, the scope of this standard has been widened to include beverages for dietetic purposes, containing electrolyte mixtures, flavoured and sweetened carbonated water with fruit juice, fruit pulp and fruit concentrates, keeping in view the existing trade practices. Several requirements on ingredients have been updated in order to bring the standard in line with existing regulatory requirements and manufacturing practices.

In view of the different varieties of carbonated beverages produced in the country, it has not been possible to include in the standard the exact or even the range of proportions of different ingredients required for the different varieties of the carbonated beverages.

In the preparation of this standard, due consideration has been given to the provisions of the Prevention of Food Adulteration Act, 1954 and the rules framed thereunder. This standard is subject to the restrictions imposed under these, wherever applicable.

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 2:1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.
Indian Standard

CARBONATED BEVERAGES — SPECIFICATION
(Second Revision)

1 SCOPE
This standard prescribes the requirements and the methods of sampling and test for carbonated beverages.

2 REFERENCES
The Indian Standards listed in Annex A are necessary adjuncts to this standard.

3 TERMINOLOGY
Carbonated beverages shall mean non-alcoholic beverages containing dissolved carbon dioxide in properly sealed containers or dispensing units.

4 TYPES
Carbonated beverages shall be of the following types:

a) Flavoured and sweetened carbonated beverages;
b) Carbonated water or soda water with or without permitted flavours;
c) Flavoured and sweetened carbonated water with dietetic/electrolyte mixtures in formulation; and

d) Flavoured and sweetened carbonated water with fruit juice, fruit pulp and fruit concentrates.

5 INGREDIENTS
5.1 Carbonated beverages may be prepared from the ingredients listed under 5.1.1 to 5.1.22 which shall meet the requirements of the relevant Indian Standard or statutory requirements, as the case may be.

5.1.1 Sugar (see IS 1679:1960)
5.1.2 Liquid Glucose (see IS 873:1956)
5.1.3 Dextrose Monohydrate (see IS 874:1965)
5.1.4 Invert Sugar
5.1.5 Fructose
5.1.6 Lactose
5.1.7 Honey (Grade Special or A of IS 4941:1974)
5.1.8 Non-nutritive Sweeteners — No artificial sweetener except saccharin shall be added. Amount of saccharin in the product shall not exceed by 100 mg/kg, when determined by the method given in Annex B.
5.1.9 Flavouring Agents — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.10 Food Colours — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.11 Acidulants — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.12 Clouding Agents — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.14 Emulsifying and Stabilizing Agents — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.15 Vitamins and Minerals — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.16 Sodium Bicarbonate, Food Grade
5.1.17 Edible Common Salt — Conforming to IS 253:1970.
5.1.18 Caffeine — Conforming to IS 11911:1986. Quantity of caffeine shall not be more than 200 mg/kg.
5.1.19 Quinine Salts — Conforming to Indian Pharmacopoeia, not exceeding 100 mg/kg calculated as quinine sulphate.
5.1.20 Preservatives — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.21 Anti-oxidants — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.22 Anti-foaming Agents — As permitted under the Prevention of Food Adulteration Rules, 1955.
5.1.23 Carbon Dioxide — Conforming to Grade 2 of IS 307:1966.

6 REQUIREMENTS
6.1 Hygienic Conditions
Carbonated beverages shall be manufactured in
factories maintained in hygienic conditions in accordance with IS 5837 : 1970.

6.2 Description

Carbonated beverages shall be free from insect and rodent contamination, skins, and shall be free from other extraneous matter. Clear carbonated beverages shall be of sparkling clarity and shall remain so when stored under normal conditions. The cloudy beverages shall be stable.

6.3 Flavour

The carbonated beverages shall have a well-balanced and pleasant flavour. The carbonated beverages of the flavoured type shall be free from off-flavours and off-odours.

6.4 Sugar Content

In the case of sweetened carbonated beverages except spiced beverages, the product on being tested after removal of the carbon dioxide shall record a brix hydrometer value of not less than 8 degrees at 20°C. In the case of dietetic/diabetic beverages, the brix hydrometer value may be 0.00 degree at 20°C.

6.5 Carbonation

The beverages shall be carbonated with carbon dioxide conforming to Grade 2 of IS 307 : 1966 to a pressure in accordance with their character. The carbonated beverages shall, however, have a minimum of one volume of carbon dioxide. A recommended method for the measurement of gas volume is given in Annex C.

NOTE — The gas volume is the amount of carbon dioxide the water will absorb at the normal atmospheric pressure at 15.56°C.

6.6 The material shall also conform to the requirements given in Table 1.

7 PACKING

7.1 Containers

The carbonated beverages shall be filled in glass containers conforming to IS 1107 : 1957. It may also be filled in cans, food-grade plastic containers and dispensing units.

7.2 All containers in which carbonated beverages are packed shall be cleaned and sanitized according to 4.1 of IS 5837 : 1970.

7.3 The containers shall be filled under strictly sanitary conditions (IS 5837 : 1970). After filling, the containers shall be hermetically sealed with clean, new crown corks conforming to IS 1994 : 1961.

7.4 Inspection of Empty and Filled Containers

Containers, both before and after filling, shall pass for inspection before a brightly illuminated background and be viewed, if necessary, under magnification. Automatic inspection by specially designed units may also be employed. Defective containers or products shall be rejected.

8 MARKING

The container shall legibly and indelibly bear the following information in addition to any other information as is necessary under the Prevention of Food Adulteration Act, 1954 and the Rules framed thereunder, and Standards of Weights and Measures (Packaged Commodities) Rules, 1977:

a) Name of the product;
b) Name and address of the manufacturer;
c) Date of manufacture;
d) Batch number;
e) Net volume of content; and
f) Any other declaration required under the Prevention of Food Adulteration Rules, 1955.

Table 1 Requirements for Carbonated Beverages

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Characteristic</th>
<th>Requirement</th>
<th>Method of Test (Ref to Indian Standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>i)</td>
<td>Arsenic, mg/kg, Max</td>
<td>0.25</td>
<td>Cl 12 of IS 6854 : 1973</td>
</tr>
<tr>
<td>ii)</td>
<td>Lead, mg/kg, Max</td>
<td>0.5</td>
<td>Cl 14 of IS 6854 : 1973</td>
</tr>
<tr>
<td>iii)</td>
<td>Copper, mg/kg, Max</td>
<td>1.5</td>
<td>Cl 15 of IS 6854 : 1973</td>
</tr>
<tr>
<td>iv)</td>
<td>Iron, mg/kg, Max</td>
<td>0.5</td>
<td>Cl 13 of IS 6854 : 1973</td>
</tr>
<tr>
<td>v)</td>
<td>Total plate count, per ml, Max</td>
<td>50</td>
<td>IS 5402 : 1969</td>
</tr>
<tr>
<td>vi)</td>
<td>Coliform count, in 100 ml</td>
<td>0</td>
<td>IS 5401 : 1969</td>
</tr>
<tr>
<td>vii)</td>
<td>Yeast and mould count, per ml, Max</td>
<td>2</td>
<td>IS 5403 : 1969</td>
</tr>
</tbody>
</table>
9 SAMPLING

9.1 Representative samples of the material shall be drawn as prescribed in Annex D.

10 TESTS

10.1 Test shall be carried out as prescribed in the appropriate appendices specified in the clauses.

10.2 Quality or Reagents

Unless otherwise specified, pure chemicals shall be employed in tests, and distilled water (see IS 1070 : 1992) shall be used wherever the use of water as a reagent is intended.

NOTE - 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

<table>
<thead>
<tr>
<th>IS No.</th>
<th>Title</th>
<th>IS No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>253 : 1985</td>
<td>Edible common salt (third revision)</td>
<td>4941 : 1974</td>
<td>Extracted honey (first revision)</td>
</tr>
<tr>
<td>307 : 1966</td>
<td>Carbon dioxide (second revision)</td>
<td>5345 : 1978</td>
<td>Sodium saccharin, food grade (first revision)</td>
</tr>
<tr>
<td>874 : 1975</td>
<td>Dextrose monohydrate (second revision)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1107 : 1986</td>
<td>Aerated water glass bottles, crown finish type (second revision)</td>
<td>5403 : 1969</td>
<td>Method for yeast and mould count in foodstuffs</td>
</tr>
<tr>
<td>1679 : 1960</td>
<td>Sugar used in food preservation industry</td>
<td>5837 : 1970</td>
<td>Code for hygienic conditions of soft drink manufacturing units</td>
</tr>
<tr>
<td>4251 : 1967</td>
<td>Quality tolerances for water for processed food industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4905 : 1968</td>
<td>Methods for random sampling</td>
<td>11911 : 1986</td>
<td>Caffeine, food grade</td>
</tr>
</tbody>
</table>

IS 2346 : 1992
ANNEX B
(Clause 5.1.8)

DETERMINATION OF SACCHARIN

B-1 GENERAL
Two methods have been prescribed for determination of saccharin content in carbonated beverages, namely volumetric method (Method I) and high performance liquid chromatography (HPLC) method (Method II). Method II shall be the referee method in case of any dispute.

B-2 METHOD I

B-2.1 Reagents

B-2.1.1 Hydrochloric Acid
36.5 to 38.0 percent.

B-2.1.2 Nessler Reagent
Dissolve 143 g sodium hydroxide in 950 ml water and filter through asbestos. Add 50 g red mercuric iodide to the filtrate and dilute with water to 1 litre and mix thoroughly. Let the solution to settle and use the supernatant solution.

B-2.1.3 Ammonium Chloride Solution (NH₄Cl)
Prepare standard ammonium chloride solution equivalent to 100 parts per million insoluble form of saccharin on the basis that 0.292 g of ammonium chloride is equivalent to 1 g of saccharin.

B-2.2 Procedure

B-2.2.1 Add 2 ml hydrochloric acid to 50 ml sample in a separating funnel. Extract with two 50 ml portions of ether. Filter ether extract through cotton and wash combined filtrate with about 5 ml water containing 1 drop of hydrochloric acid. Separate the ether layer and evaporate the dryness on water-bath. Add to the residue, 5 ml ammonia-free water and 5 ml hydrochloric acid. Evaporate the solution to about 1 ml on a hot-plate, stirring constantly. Again add 5 ml ammonia-free water and 6 ml hydrochloric acid and evaporate to about 1 ml. Dilute to 50 ml with ammonia-free water and then dilute 2 ml of this solution to 25 ml with ammonia-free water. Add 1 ml of Nessler reagent. Compare this with ammonium chloride solution.

B-2.2.2 Millipore Filter
Pore size shall be 0.45 μm.

B-3 METHOD II

B-3.1 Principle
A high performance liquid chromatograph (HPLC) unit with an ultra-violet (UV) detector at 254 nm wave length is used for determination of saccharin content in carbonated beverages. Acetic acid is used as mobile phase.

B-3.2 Apparatus

B-3.2.1 HPLC Unit
The instrument shall be equipped with a printer-plotter-cum-integrator and UV detector. The suggestive parameters are given below and these can be varied provided standardization is done:

- **Column**: Stainless steel, 300 mm × 4 mm; packed with silica (5 μm particle size).
- **Detector**: UV (254 nm)
- **Mobile Phase**: 20 percent (v/v) acetic acid buffered to pH 3.0 with saturated sodium acetate solution. Modify with 0-2 percent isopropanol to obtain baseline resolution and retention times of standards from mixed standard solution in about 10 minutes. Solution will be stable for 2-3 days. Degas prior to use. Alternatively, acetic acid of lower concentration may be used, and for some compounds, may be necessary to obtain retention and/or resolution. Acetic acid of lower concentration may give longer retention time, for example, 5 percent (v/v) solution elutes compounds in 35 minutes.

- **Flow Rate**: 2 ml/min
- **Sample Size**: 10 μl

B-3.2.2 Millipore Filter
Pore size shall be 0.45 μm.

B-3.3 Reagents

B-3.3.1 Sodium Saccharin Reference Standard of Known Purity

B-3.4 Procedure

B-3.4.1 Preparation of Standard Solution
Prepare standard solution to contain 0.50 mg/ml of sodium saccharin.

B-3.4.2 Preparation of Sample Solution
Take a quantity of sample and decarbonate by
agitation or ultrasonic treatment. If free of particulate matter, inject directly. If particulate matter is present, filter through millipore filter, discarding first few millilitre of the filtrate.

B-3.4.3 Determination

Inject 10 μl of the standard solution in duplicate. Peak heights should agree (within < 2.5%). Inject the same volume of prepared sample solution in duplicate. Measure the peak areas of standard and sample components.

B-3.5 Calculation

\[
\text{Saccharin content} = \frac{A \times V_1 \times C \times 0.1}{A_s \times V_s}
\]

where

- \( A \) = average peak area of sample injected;
- \( V_1 \) = volume, in ml of standard solution injected;
- \( C \) = concentration of standard in mg/ml;
- \( A_s \) = average peak area of standard; and
- \( V_s \) = volume, in ml of sample solution injected.

ANNEX C

(Clause 6.5)

METHOD OF MEASURING GAS VOLUME

C-1 APPARATUS

C-1.1 The apparatus consists of a pressure gauge having a hollow spike with holes in its side. The bottle is inserted from the side into the slot provided in the neck of the carbon dioxide tester and is secured in place by tightening with a threaded system. The pressure gauge is inserted until the needle point touches the crown cork. There is a sniff valve on the gauge stem which is kept closed until the needle point of the pressure gauge is forced through the crown cork. The reading is noted on the gauge.

C-2 PROCEDURE

C-2.1 Clamp the bottle in the frame of the gas volume tester. Pierce the crown cork but do not shake the bottle. Sniff off the top gas quickly until the gauge reading drops to zero. Make certain to close the valve the instant the needle touches zero in the pressure gauge. Shake the bottle vigorously until the gauge gives a reading that additional shaking does not change. Record the pressure. Note the temperature and record it. Obtain the volume of gas from Table 2 of IS 2346 : 1973.

ANNEX D

(Clause 9.1)

SAMPLING OF CARBONATED BEVERAGES

D-1 SCALE OF SAMPLING

D-1.1 Lot

All bottles in a consignment belonging to the same batch of manufacture shall constitute a lot. If the consignment is declared to consist of different batches of manufacture, bottles of the same batch shall be grouped together and each group so formed shall constitute a separate lot.

D-1.1.1 Samples shall be tested from each lot for ascertaining conformity to the requirements of the standard.

D-1.2 The number of bottles to be selected from a lot for testing for the microbiological and other requirements shall depend on the size of the lot and shall be in accordance with Table 3.

Table 3 Number of Bottles to be Selected for Sampling

<table>
<thead>
<tr>
<th>No. of Bottles in the Lot</th>
<th>No. of Bottles to be Selected for Microbiological Tests</th>
<th>Other Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Up to 1 300</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>1 301 to 3 200</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>3 201 and above</td>
<td>24</td>
<td>30</td>
</tr>
</tbody>
</table>
D-1.3 The bottles to be selected for testing shall be chosen at random from the lot and for this purpose random number tables (see IS 4905 : 1968) shall be used. In case such tables are not available, the following procedure may be adopted.

Starting from any bottle, count them as 1, 2, 3,...up to r. Every rth bottle thus counted shall be withdrawn, r being the integral part of \( N/n \), where \( N \) is the total number of bottles in the lot and \( n \) the total number of bottles to be chosen.

D-2 TEST SAMPLES AND REFEREE SAMPLES

D-2.1 Samples for Microbiological Tests

The sample bottles selected for microbiological tests (see col 2 of Table 3) shall be divided at random into three equal sets and labelled with all the particulars of sampling. One of these sets of sample bottles shall be for the purchaser, another for the vendor and the third for the referee.

D-2.2 Samples for Other Tests

The sample bottles selected for other tests (see col 3 of Table 3) shall be divided at random into three equal sets and labelled with all the particulars of sampling. One of these sets of sample bottles shall be for the purchaser, another for the vendor and the third for the referee.

D-2.3 Referee Samples

Referee samples shall consist of a set of sample bottles for microbiological tests (see D-2.1) and a set of sample bottles for other tests (see D-2.2) and shall bear the seals of the purchaser and the vendor (or their representatives) and shall be kept at a place agreed to between the two.

D-3 TESTING OF SAMPLES

D-3.1 Tests of Microbiological Requirements

The sample bottles obtained as in D-2.1 shall be tested for all the microbiological requirements.

D-3.2 Test for Other Requirements

Sample bottles obtained as in D-2.2 shall be tested for all the other requirements.

D-4 CRITERIA FOR CONFORMITY

D-4.1 Lot shall be considered as conforming to the requirements of this standard if all the samples tested (see D-3.1 and D-3.2) satisfy the requirements specified in the standard.
Bureau of Indian Standards

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Amendments Issued Since Publication

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<th>Amend No.</th>
<th>Date of Issue</th>
<th>Text Affected</th>
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</thead>
</table>

BUREAU OF INDIAN STANDARDS

Headquarters:
Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
Telephones : 323 01 31, 323 94 02, 323 33 75

Regional Offices:
Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg
NEW DELHI 110002

Eastern : 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola
CALCUTTA 700054

Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022

Southern : C. I. T Campus, IV Cross Road, CHENNAI 600113

Western : Manakaiaya, E9 MIDC, Marol, Andheri (East)
MUMBAI 400093

Branches : AHMADABAD. BANGALORE. BHOPAL. BHBANESHWAR.
COIMBATORE. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR.
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