

केंद्रीय मुहर विभाग-2

संदर्भ: कें.मु.वि.-2/16:14543

05 04 2019

विषय: आई एस 14543:2016 "पैकेजबंद पेयजल (पैकेजबंद प्राकृतिक मिनरल जल के अलावा)" की संशोधित निरीक्षण और परीक्षण की योजना (एस आई टी) (Doc: SIT/14543/2 April 2019)

उपरोक्त विषय पर परिपत्र कार्यान्वयन हेतु संलग्न है।

(आदित्य दास)
वैज्ञानिक सी (कें.मु.वि.-2)

प्रमुख (कें.मु.वि.-2)

सभी क्षेत्रीय /शाखा कार्यालयों/एफ ए डी/एल पी पी डी को परिचालित

प्रतिलिपि: आई टी एस - इंटरनेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT-2

Our Ref : CMD-2/16:14543

05 04 2019

Subject: Revised Scheme of Inspection and Testing for Packaged Drinking Water (other than Packaged Natural Mineral Water) as per IS 14543:2016 (Doc: SIT/14543/2 April 2019)

Please find enclosed circular regarding the subject matter for implementation.

(Aditya Das)
Scientist C (CMD-2)

Head CMD-2

Circulated to all ROs/BOs/FAD/LPPD

Copy to: ITS for hosting on Intranet

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:14543

05-04-2019

Subject: Revised Scheme of Inspection and Testing for Packaged Drinking Water (as per IS 14543:2016 with amendment nos. 1 and 2 (Doc: SIT/14543/2 April 2019))

1. This has reference to the Scheme of Inspection and Testing for Packaged Drinking Water **Doc: SIT/14543/1 Nov 2018** which was circulated for implementation on 03.12.2018.
2. However, based on inputs received from manufacturers and BOs regarding difficulties in implementation of the SIT, the same was reviewed and a revised SIT **Doc: SIT/14543/2 April 2019** has been prepared addressing those issues which is enclosed.
3. In addition, representations were received regarding difficulty in marking of new BIS website URL address www.bis.gov.in on the labels as existing marking cylinders and label stock was as per the old website www.bis.org.in. In this regard, it has been decided that since licensees will require time to exhaust existing stock of labels and to change the marking cylinders, BOs may not insist licensees to change marking labels to reflect to new website address till such time as the existing labels are exhausted and marking cylinders can be changed. However, new applicants may be advised to mark the new website details only.
4. Further, it is also informed that the provisions of this SIT take precedence over previous guidelines issued for certification of Packaged Drinking Water including Water Manual and supersedes the previous SIT Doc: SIT/14543/1 Nov 2018.
5. All BOs are requested to consider the above and ensure implementation of the revised SIT at the earliest **within 30 days** of this circular.
6. This issues with the approval of DDG (Certification).

Aditya Das
Sc. C

HCMD-2
ROs/BOs

Copy to:

DDGRs - for kind information

Head FAD - for kind information

Head LPPD - for kind information

ITSD - for hosting on BIS intranet for information of all

**SCHEME OF INSPECTION AND TESTING
FOR CERTIFICATION OF PACKAGED DRINKING WATER (OTHER THAN PACKAGED
NATURAL MINERAL WATER) ACCORDING TO IS 14543: 2016
(Incorporating Amendment No. 1 and 2)**

1.0 LABORATORY -A laboratory shall be maintained which shall be suitably equipped and staffed with competent testing person(s) to carry out the different tests in accordance with the methods given in the Indian standards.

Testing person(s) shall be science/engineering graduate from disciplines such as chemistry/chemical engineering/ microbiology/ biotechnology/ biochemistry/ food technology/ botany and other biological/ life sciences. Engineering graduates from disciplines such as chemical engineering may also be engaged as testing persons.

2.0 TEST RECORDS - All records of analysis and tests shall be kept in suitable forms approved by the Bureau of Indian Standards (BIS) for a minimum period of 3 years.

Copies of any records that may be required by BIS shall be made available at any time on request.

3.0 LABELLING AND MARKING - The Standard Mark, as given in the Schedule of the Licence shall be clearly marked legibly and indelibly on the label of the bottle/container or on the pouch as the case may be, provided always that the material on which this Mark is applied conforms to every requirement of the specification. The dimension of standard mark shall be in accordance with specified design.

3.1 PACKING – The Packaged Drinking Water shall be packed as per clause 3.2, clause 5.1, clause 6 and Annex B of IS 14543:2016. The pouches and bottles/containers shall be supplied in secondary packaging as agreed to between the purchaser and the supplier.

3.2 MARKING – In addition to the Standard Mark as per clause 7. 3 of IS 14543:2016 the following information shall be given legibly & indelibly on each bottle/container or its label or directly printed on the pouch/bottle/container.

- i. Name of the product (i.e. Packaged Drinking Water)
- ii. Name and full address of the processor (i.e. manufacturer);
- iii. Brand Name, if any;
- iv. Batch or Code Number/Control Unit No.;
- v. Date of processing/packing;
- vi. Treatment of disinfection, if any;
- vii. Best before..... (date/month/year in capital letters);OR Best beforedays or months from the date of packaging/manufacture;
- viii. Net quantity;
- ix. Direction for storage;
- x. Keep the container away from direct sunlight; and
- xi. Any other information required under the Legal Metrology(Packaged Commodity) Rules, 2011 and the Food Safety and Standards (Packaging and Labeling) Regulations 2011.
- xii. Recycling symbol as per IS14535,
- xiii. BIS website details: www.bis.gov.in

3.2.1 Minimum height of the BIS Standard Mark on different pack sizes of Packaged Drinking Water shall be as under:

S. No.	Size of Container	Min height of BIS Standard Mark*
1	Pouch/Cups/bottle(250 ml capacity & below)	5mm
2	Bottles upto500ml capacity & below (but greater than 250 ml capacity)	7.5mm

3	Bottles more than 500ml capacity	10mm
4	All re-useable Jars	15mm
(* other dimensions of the BIS Standard Mark shall be in appropriate proportions as per BIS guidelines).		

3.3 Each secondary packing of pouches/bottles/containers shall be marked with the following, except where such secondary packing is transparent and the markings on the pouches/bottles/containers are legible through the secondary packing:

- i. Indication of the source of manufacture i.e. manufacturer's name and address;
- ii. Number of pouches/bottles/containers
- iii. Brand name, if any
- iv. Nominal capacity;
- v. Batch No. or Code No.

3.4 LABELLING PROHIBITIONS -The label on the bottles/containers/pouches and/or the secondary packaging shall not contain claims which are prohibited as per clause 7.2 of IS14543:2016.

3.5 Shelf life: Declared shelf life for Packaged Drinking Water in all type of packing materials shall not be less than 30 days. (also see Table 1 and Note 8 under Table 1)

3.6 Brand names: The labels conforming to the marking details as mentioned in clause 7 of IS 14543 along with the brand names are to be submitted to by licensees to BIS for information only, which will only be noted by BIS for records. The compliance of such labels to the requirement of clause 7 shall be ensured by licensees. However, in case non-compliance to Clause 7 is observed by BIS and communicated in writing to licensee, licensee shall make necessary rectification and resubmit the label for confirmation to concerned BIS Branch Office within 15 days. Decision of BIS regarding whether labeling is complying or not with clause 7 of IS 14543 shall be final.

4.0 LEVELS OF CONTROL -The tests as indicated in Table 1 and at the levels of control specified therein, shall be carried out on the whole production of the factory covered by this Scheme and appropriate records maintained in accordance with clause 2 of this Scheme. Entire production which conforms to the Indian Standard and covered by the licence shall be marked with Certification Mark of the Bureau.

5.0 CONTROL UNIT - For the purpose of this Scheme, the quantity of packaged drinking water treated/processed from each processing line and filled/packed in one day shall constitute a Control Unit.

5.1 On the basis of tests and analysis results, the decision regarding conformity or otherwise of a Control Unit to the given requirements shall be made.

5.2 In respect of all other clauses of the Standard (other than those mentioned under Levels of Control-Table 1 of this Scheme) the factory shall maintain appropriate controls and checks to ensure that their product conforms to the requirements of the standard.

5.3 Records of the batch wise consumption of the added minerals, if applicable, are to be maintained along with the invoices and test certificates for the same.

6.0 Microbiological Requirements - If any failure is noticed in any of the microbiological requirements, control units available in the stock shall be rechecked and released into the market only after conformity is ensured.

6.1 The licensee shall take immediate corrective actions, which would involve complete investigation of the reasons for contamination and non-conformity. The manufacturer should re-

start marking and dispatch only after the completion of satisfactory corrective actions and availability of satisfactory results of all microbiological tests as applicable for each control unit, for next 2 consecutive control units. The manufacturer shall keep complete records of such instances for review by BIS for minimum period of 5 years.

7.0 SOURCE WATER - The source water used in production of Packaged Drinking Water shall be initially tested for Organoleptic and physical parameters (Table 1), Chemical requirements (Table 2), and all microbiological requirements possible to be tested in house. Subsequently, its quality may be regularly assessed at least once in three months through in-house testing for Colour, Odour, Taste, Turbidity, pH, Total Dissolved Solids and Microbiological requirements. In addition, any other requirements as considered necessary for process control, are to be tested where the incidence of their presence in higher levels has been detected during the previous tests.

7.1 Whenever, the quality of processed water is found to be not meeting the requirements of IS 14543 for the tested parameters, the source water shall be checked again for such parameters in which failure is observed for deciding upon the necessary controls to be exercised for conformance of quality of processed water to IS 14543.

7.2 In case non-conformity is observed for radioactive residues, the source of raw water shall be abandoned and water shall be recalled immediately.

7.3 As and when there is change in source water or addition of new source of raw water, it shall be intimated to BIS. The raw water collected from the new source shall be tested in accordance with Clause 7 as above and the processed water produced from such source water shall be tested for conformity to IS 14543 from BIS recognized outside lab. The reports of source water and the product water produced from the new source shall be submitted to BIS for approval before commissioning for regular production and marking.

7.4 The source water shall be treated as per clause 5.1 of IS 14543:2016. In case the licensee carries out remineralization as part of its treatment process, the ingredients used shall conform to food grade/pharma grade quality. The test certificate of these ingredients shall be submitted to BIS.

7.5 The means adopted for disinfection of the product water shall be declared and shall be done in accordance with clause 5.1.1 of IS 14543:2016.

8.0 Plastic Jars/Bottles/Containers - The plastic containers used for packing the material shall conform to IS 15410:2003. The conformity assessment shall be carried in accordance with the levels of controls as given under Table 2.

8.1 In addition, the top lid for glasses/cups shall be of suitable peelable structure in accordance with Clause 4.2.1 of IS 15410:2003.

8.2 Pouches—The polyethylene film and pouches shall conform to IS 15609. The conformity assessment shall be carried in accordance with the levels of controls as given under Table3.

9.0 REUSED CONTAINERS – Licensee shall ensure use of only such jars for packing the product water whose transparency continues to meet the requirements as per IS 15410 even after its repeated use. Jars which get soiled, de-shaped and/or mutilated during the course of use and refilling shall not be used.

9.1 Water to be used for the purpose of cleaning etc. IS 4251:1967 may be followed as Good Manufacturing practices.

10.0 HYGIENIC CONDITION - The source water shall be collected, processed, handled, stored, packed and marketed in accordance with the hygienic practices given under Annex B of IS 14543:2016. Other clauses shall also be complied in day to day production and quality

control activities. Schedule for each activity for this purpose shall be displayed prominently in the factory premises and records of compliance shall be maintained for scrutiny by the Bureau. The hygienic conditions shall also be maintained at the site of water source. A check list for good hygienic practices and food safety system for packaged drinking water processing units is given in Annex C of IS 14543:2016.

11.0 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. A separate record providing the detailed information regarding the rejected control units and mode of their disposal shall be maintained. Such material shall in no case be stored together with that conforming to the specification.

**IS 14543:2016 PACKAGED DRINKING WATER
(OTHER THAN PACKAGED NATURAL MINERAL WATER)
TABLE 1 LEVELS OF CONTROL
(Para 4 of the Scheme of Inspection and Testing)**

TEST DETAILS				Test equipment requirement R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		REMARKS
Clause	Requirement	Test Method			No. of Sample	Frequency	
		Clause	Reference				
5.2	Microbiological Requirement						
5.2.1	Escherichia coli	--	IS 15185	R	One	Each control unit	
5.2.2	Coliform Bacteria	--	IS 5401 (Part-1)* or IS 15185	R	One	Each control unit	
5.2.3	Faecal Streptococci and Staphylococcus aureus	--	IS 5887 (Part-2)* or IS 15186	S	One	Once in month	
5.2.4	Sulphite Reducing Anaerobes	--	Annex C of IS 13428	R	One	Each control unit	
5.2.5	Pseudomonas aeruginosa	--	Annex D of IS 13428	R	One	Each control unit	
5.2.6	Aerobic Microbial Count	--	IS 5402	R	One	Each control unit	
5.2.7	Yeast & Mould	--	IS 5403	R	One	Each control unit	
5.2.8	Salmonella and Shigella	--	IS 15187 & IS 5887 (Part-7), respectively	S	One	Once in month	
5.2.9	Vibrio cholera and V. parahaemolyticus	--	IS 5887 (Part-5)	S	One	Once in month	

TABLE 1 (continued)

TEST DETAILS				Test equipment requirement R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		REMARKS
Clause	Requirement	Test Method			No. of Sample	Frequency	
		Clause	Reference				
5.3	Description	5.3	IS 14543	R	One	Each Control Unit	-
5.3 and Table 1	i) Colour	-	IS 3025 (Part 4)	R	One	Each Control Unit	See Note 2
-do-	ii) Odour	-	IS 3025 (Part 5)	R	One	Each Control Unit	-do-
-do-	iii) Taste	-	IS 3025 (Part 8)	R	One	Each Control Unit	-do-
-do-	iv) Turbidity	-	IS 3025 (Part 10)	R	One	Each Control Unit	-do-
-do-	v) Total Dissolved Solids	-	IS 3025 (Part 16)	R	One	Each Control Unit	See Note 3
-do-	vi) pH	-	IS 3025 (Part 11)	R	One	Every four hours	See Note 2
5.3 and Table 2	i) Barium (as Ba)	-	Annex F of IS 13428 or IS 15302 or IS 3025 (Part 2)	S	One	Once in a month	See Note 4
-do-	ii) Copper (as Cu)	-	IS 3025 (Part 42)* or IS 3025 (Part 2)	S	One	Once in a month	-do-
-do-	iii) Iron (as Fe)	-	IS 3025(Part 53)*or IS 15303 or IS 3025 (Part 2)	S	One	Once in a month	-do-
-do-	iv) Manganese (as Mn)	-	IS 3025 (Part 59)* or IS 3025 (Part 2)	S	One	Once in a month	-do-
-do-	v) Nitrate (as NO3)	-	IS 3025 (Part 34)	R	One	Once in a week	-do-
-do-	vi) Nitrite (as NO2)	-	IS 3025 (Part 34)	R	One	Once in a week	-do-
-do-	vii) Fluoride (as F)	-	IS 3025 (Part 60)	S	One	Once in six months	See Note 6
-do-	viii) Zinc (as Zn)	-	IS 3025 (Part 49)* or IS 3025 (Part 2)	S	One	Once in a month	See Note 5
-do-	ix) Silver (as Ag)	-	Annex J of IS 13428	S	One	-Once in six months -See Note 6 also	-Once in a month for licensees using silver in any form. -See Note 5 also
-do-	x) Aluminium (as Al)	-	IS 3025 (Part 55) or IS 15302	R	One	Once in a week	See Note 4
-do-	xi) Chloride (as Cl)	-	IS 3025 (Part 32)	R	One	Each control unit	See Note 2

-do-	xii)	Selenium((as Se)	-	IS 3025 (Part 56)	S	One	Once in six months	See Note 6
-do-	xiii)	Sulphate (as SO4)	-	IS 3025 (Part 24)	R	One	Each control unit	See Note 2
-do-	xiv)	Alkalinity (as HCO3)	-	IS 3025 (Part 23)	R	One	Each control unit	See Note 2
5.3 and Table 2	xv)	Calcium (asCa)	-	IS 3025 (Part 40)* or IS 3025 (Part 2)	R	One	Once in a week	See Note 4
-do-	xvi)	Magnesium (asMg)	-	IS 3025 (Part 46)* or IS 3025 (Part2)	R	One	Once in a week	See Note 4
-do-	xvii)	Sodium (as Na)	-	IS 3025 (Part 45)* or IS 3025(Part 2)	S	One	Once in six months	See Note 6
-do-	xviii)	Residual Free Chlorine	-	IS 3025 (Part 26)	R	One	Each control unit	See Note 2
-do-	xix)	Phenolic compounds (asC6H5OH)	6	IS 3025 (Part 43)	S	One	Once in a month	See Note 5
-do-	xx)	Mineral Oil	6	IS 3025 (Part 39)	S	One	Once in a month	See Note 5
-do-	xxi)	Anionic surface active agents (asMBAS)	-	Annex K of IS 13428	S	One	Once in a month	See Note 5
-do-	xxii)	Sulphide (as H2S)	-	IS 3025 (Part 29)	R	One	Once in a week	See Note 4
-do-	xxiii)	Antimony (as Sb)	-	Annex G of IS 13428* or IS 15303	S	One	Once in a month	See Note 5
-do-	xxiv)	Borates (as B)	-	Annex H of IS 13428* or IS 3025 (Part 2)	S	One	Once in a month	See Note 5
-do-	xxv)	Bromates (as BrO3)	-	ISO 15061	S	One	Once in six months	See Note 6
5.3 & Table 3	i)	Mercury (asHg)	-	IS 3025 (Part 48)	S	one	Once in six months	See Note 6
-do-	ii)	Cadmium (asCd)	-	IS 3025 (Part 41)	S	one	-do-	-do-
-do-	iii)	Arsenic (asAs)	-	IS 3025 (Part 37)	S	one	-do-	-do-
-do-	iv)	Cyanide (asCN)	2	IS 3025 (Part 27)	S	one	-do-	-do-
-do-	v)	Lead (asPb)	-	IS 3025 (Part 47)	S	one	-do-	-do-
-do-	vi)	Chromium (asCr)	-	Annex J IS 13428* or IS 3025 (Part 2)	S	one	-do-	-do-
-do-	vii)	Nickel (asNi)	-	Annex L IS 13428	S	one	-do-	-do-
-do-	viii)	Polychlorinated biphenyl(PCB)	-	Annex M of IS 13428	S	one	-do-	-do-
-do-	ix)	Polynuclear aromatic hydrocarbons	-	APHA 6440	S	one	-do-	-do-

TEST DETAILS				Test equipment requirement R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		REMARKS
Clause	Requirement	Test Method			No. of Sample	Frequency	
		Clause	Reference				
5.3 & Table 4	i) Alpha emitters	-	IS 14194 (Part 2)	S	one	Once in five years	
-do-	ii) Beta emitters	-	IS 14194 (Part 1)	S	one	-do-	
5.4	Pesticide Residues	5.4	Annex D of IS 14543				See Note 1 below
i)	Pesticide residues considered individually	5.4.1	IS 14543**	S	One	Once in 6 months in 1 st operative period	See Note 1 below
ii)	Total pesticide residue	-do-	-do-		-do-	-do-	-do-
-	Shelf Life Assessment	B 8.9	Annex B of IS 14543	R		Once in six months each type of container shall be tested for shelf life assessment	See Note 8 below

In case of dispute, methods given at column 4 and wherever indicated by “*” shall be the referee method.

**Shall be got tested from BIS recognized laboratory using internationally established test method as specified in Annex D of IS 14543 : 2016

Note 1: For tests with frequency of once in 6 months, in case no failure is observed during the first operative period (sample tested every 6 months) the frequency of such test may be reduced to one year. In case any failure is observed, after taking corrective action, the frequency shall be increased to once in three months. The original frequency of once in 6 months may be restored only if two consecutive samples pass.

Note 2: In case of failure in any requirement with frequency of each control unit like colour, odour, taste, turbidity, Chloride, Sulphate, Alkalinity, Residual free chlorine, after taking corrective action the frequency to be increased from each control unit to every four hours for one month. Thereafter frequency of each control unit may be restored if all the samples during the month are found passing. For pH, in case of failure, after taking corrective action, the frequency to be increased from every four hours to every hour for a week. Thereafter frequency of every 4 hours may be restored if all the samples during the week are found passing.

Note 3: In case of failure in total dissolved solid, after taking corrective action, the frequency to be increased from each control unit to every four hours for one month. Thereafter frequency of each control unit may be restored if all the samples during the month are found passing.

Note 4: In case of failure in any requirement like Barium, Copper, Iron, Manganese with frequency of once a month, after taking corrective actions, samples from 2 consecutive control units shall be tested in house or in BIS recognized third party lab. Thereafter frequency of once in a month may be restored if the samples from both control units are found passing. For Nitrate, Nitrite, Aluminium, Calcium, Magnesium, and Sulphide in case of failure, after taking corrective action, the frequency to be increased from once in a week to each control unit for one month. Thereafter frequency of once in a week may be restored if all the samples during the month are found passing

Note 5: In case of failure in any requirement like Zinc, Phenolic Compounds, Mineral Oil, Anionic surface active agents, Antimony, Borate, Silver (For licensee using silver in any form) with frequency of once a month, after taking corrective actions, samples from 2 consecutive control units shall be tested in house or in BIS recognized third party lab. Thereafter frequency of once in a month may be restored if the samples from both control units are found passing.

Note 6: In case of failure in any requirement like Fluoride, Silver, Selenium, Bromate, Sodium, Mercury, Cadmium, Arsenic, Cyanide, Lead, Chromium, Nickel, PCB, PAH, with frequency of once in six months, the frequency to be increased from once in 6 months to once in 3 months for 6 months. Thereafter frequency of once in 6 months may be restored only if both the samples tested at each quarter are found passing.

Note 7: Approved international standard test methods from organizations like ISO/ APHA/ ASTM/ AOAC/EPA/EN may also be permitted for performing tests given in Table 2 & 3. In case of dispute, methods given at column 4 and wherever indicated by “*” shall be the referee method.

Note 8: Shelf Life testing shall be done in house for all possible tests for description, organoleptic, physico-chemical, chemical, and microbiological parameters which are possible to be tested in house as per test methods prescribed in IS 14543. Records of shelf life studies to be maintained. In case of failure, the manufacturer shall review the shelf life declaration and re-declare the suitable revised shelf life.

Note-9: 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-10: The control unit and levels of control as decided by the Bureau are obligatory to which the licensee shall comply with.

Note -11: Whenever, due to failure, the test frequency is increased, the compliance for such frequency levels may be ensured either from in-house or OSL testing of samples.

**FORM 1
REPORT FOR FOUR HOURLY PH TESTING**

Date of Production	Batch Number/ control unit number	pH	Remarks
1	2	3	4

**FORM 2
REPORT FOR DAILY/ EACH CONTROL UNIT TESTING**

Date of Production	Batch Number/ control unit number	Description	Colour	Odour	Taste	Turbidity	TDS	Chloride	Sulphate	Alkalinity	Residual Free chlorine	E.coli	Coliform Bacteria	Sulphite reducing anaerobes	Pseudomonas aeruginosa	Aerobic microbial count		Yeast & Mould	Remarks
																20-220C	370C		
1	2	3					4	5	6	7	8	9	10	11	12	13	14	15	16

**FORM 3
REPORT FOR WEEKLY & MONTHLY TESTING**

Date	Batch/control unit no.	Barium	Copper	Iron	Manganese	Nitrate	Nitrite	Aluminium	Calcium	Sulphide	Magnesium	Antimony	Borate	Phenolic Compounds	Mineral Oil	Zinc	Anionic Surface Active Agents	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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FORM 4

FORMAT FOR TESTING FROM BIS RECOGNIZED OUTSIDE LABORATORY

Month & Year	Batch No./DOM	Type of packing	Dates on which sample sent	Lab to which sample sent	Test report number & date	Results	Remarks

1. REPORT FOR MONTHLYTEST

- i. Faecal streptococci and S. aureus, Salmonella and Shigella, V. cholera and V. parahaemolyticus
- ii. Mineral Oil, Zinc, Anionic Surface Active Agents, Phenolic Compounds, Antimony, Borates,
- iii. Barium, Copper, Iron, Manganese (If done from BIS recognized outside laboratory)

2. REPORT FOR SIX MONTHLYTEST

- i. Mercury, Cadmium, Arsenic, Cyanide, Lead, Chromium, Nickel, Fluoride, Selenium, Sodium, PCB, PAH, Bromates
- ii. Silver (as applicable)
- iii. Pesticide Residues

3. REPORT FOR FIVE YEARLY TEST

- I. Radio Active Residues (Alpha and Beta Emitters)

FORM 5

SOURCE WATER TESTING (3 MONTHLY TESTS)

Month & Year	Source of water	In-house testing	Outside testing (if done)			Record of in-house testing/outside TR	Results	Remarks
			Name of lab	sample sent on	TR No. & Date			

FORM 6

RECORD FOR PLASTIC CONTAINERS USED FOR PACKING WATER

Date of receipt	Type of packing material	Name of supplier	Quantity received	Whether ISI marked	Details of outside testing		Results			Remarks
					Name of lab	Date of sending samples	Overall migration	Colour migration	Remaining parameters as per IS 15410	

FORM 7

RECORDS FOR SHELF LIFE ASSESSMENT (SEPARATE FOR EACH TYPE OF CONTAINER BEING USED)

Date on which sample kept	Batch No./DOM	Type of packing whose sample kept	Declared shelf life	Periodicity of testing	Date of Testing	Requirements Tested	Results	Remarks

FORM 8

FORMAT FOR PEFILM

Date of Receipt of Rolls	Name of Supplier	Quantity Received (No. of Rolls)	Details of Test report from O S Lab. With date	Description	Film Form	Winding of Film	Odour	Thickness	Width	Overall Migration	Tensile Strength	Elongation at Break	Dart Impact Resistance	Results	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)

FORM 9

FORMAT FOR POUCH TESTING

Date of Pouch Production	Time of production	Total quantity produced	Drop Test					Stack Load Test	Ink Adhesion of Printed Pouches	Product Resistance of Printed Pouches	Water Potability Test	Results	Remarks
			Machine No.										
			1	2	3	4	Etc.						
(1)	(2)	(3)	(4)					(5)	(6)	(7)	(8)	(9)	(10)

TABLE 2
GUIDELINES ON ENSURING CONFORMITY OF CONTAINERS USED FOR PACKAGED DRINKING WATER

Type of container	Parameters	Options for mode of conformity	Frequency to be followed by licensee
a) Plastic Jars	<ul style="list-style-type: none"> i) Overall migration and colour migration as per Clause 6 of IS 14543 & ii) Conformity to IS15410 	<ul style="list-style-type: none"> i) 'ISI' marked, OR ii) In-house Test Reports of licensee, if facilities exist; OR iii) BIS recognized outside laboratory Test Report of the samples (not older than 6months from the date of purchase) ; OR iv) Combination of the above. 	Once in six months, sample from one consignment of plastic jars of each size/material procured from a single source (i.e. supplier) shall be tested as per the modes of conformity given in column 3 (Not required if material is ISI marked)
b) Plastic Bottles, Glass/ cups	<ul style="list-style-type: none"> i) Overall migration and colour migration as per Clause 6 of IS 14543& ii) Conformity to IS15410 	<ul style="list-style-type: none"> i) 'ISI' marked OR ii) In-house Test Reports of licensee, if facilities exist OR iii) BIS recognized outside laboratory Test Report of the samples (not older than 6months from the date of purchase) 	Once in six months, sample from one consignment of plastic bottles/glasses/cups of each type/shape/capacity/material procured from a single source (i.e. supplier) shall be tested as per the modes of conformity given in column 3 (Not required if material is ISI marked)
c) Plastic cap (closures) of containers	Overall migration and colour migration as per Clause 6 of IS 14543	<ul style="list-style-type: none"> i) Declaration/ certificate w.r.t. foodgrade quality, as permitted under IS14543 , AND ii) In house test report of licensee, if facilities exist OR iii) BIS recognized outside laboratory test report of samples (not older than 6months from the date of purchase) 	Once in six months, sample from one consignment of plastic caps/closures of each size/material procured from a single source (i.e. supplier) shall be tested as per the modes of conformity given in column 3 (Not required if material is ISI marked)

d) Foil (for sealing of plastic cups/ glasses)	Overall migration and colour migration as per Clause 6 of IS 14543:2016&	<ul style="list-style-type: none"> i) Declaration/ certificate w.r.t. food grade quality of the material used for the plastic film, AND ii) In house test report of licensee, if facilities exist OR iii) BIS recognized Outside test report of samples (not older than 6months from the date of purchase) 	Once in six months, sample from one consignment of one consignment of foils procured from a single source (i.e. supplier) shall be tested as per the modes of conformity given in column 3 (Not required if material is ISI marked)

Note : Licensee to keep records of receipt for all types of containers and closures received, along with the corresponding test certificate in case of ISI marked consignment or test reports of samples tested in-house or got tested as per the specified frequency at BIS recognized laboratory, to be verified by BIS during periodic inspections for adequacy of the system being followed by licensee to control quality of packaging material received, accepted, rejected and method of disposal.

TABLE 3
Levels of control for Polyethylene Flexible Pouches for the packing of Packaged Drinking Water as per IS 15609

TEST DETAILS				Test equipment requirement R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		
Clause	Requirement	Test Method			No. of Samples	Lot size	Remarks (Modes of Conformity etc.)
		Clause	Reference				
5	Material	5	IS 15609	S	One	Each consignment of Polyethylene film	i) ISI Marked, OR ii) BIS recognized outside laboratory Test Report of the samples, OR iii) Test certificate issued by PE resin supplier.
6.1	Requirement for Polyethylene Film						
6.1.1	Description	6.1.1	IS 15609	R	One	Each roll of polyethylene film	All rolls to be checked before using the same for making pouches. All such rolls which do not conform to the requirement shall be rejected
6.1.2	Film Form	6.1.2	-do-	R	-do-	-do-	-do-
6.1.3	Winding of film	6.1.3	-do-	R	-do-	-do-	-do-
6.1.4	Odour	6.1.4	-do-	R	-do-	-do-	-do-
6.1.5	Thickness	6.1.5	-do-	R	-do-	-do-	-do-
6.1.6	Width	6.1.6	-do-	R	-do-	-do-	-do-
6.1.7	Overall Migration	6.1.7	-do-	S	-do-	One consignment from each source (i.e. supplier) initially and subsequently once every six months for each source (i.e. supplier)	i) ISI Marked, OR ii) In house test report, if facility exist with the licensee OR iii) Outside approved laboratory test report of the sample If the sample does not conform to the requirement, the consignment shall be rejected.

Table 3 contd...

TEST DETAILS				Test equipment requirement R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		
Clause	Requirement	Test Method			No. of Samples	Lot size	Remarks
		Clause	Reference				
6.1.8	Tensile strength	6.1.8	-do-	S	-do-	-do-	-do-
6.1.9	Elongation of break	6.1.9	-do-	S	-do-	-do-	-do-
6.1.10	Dart impact resistance	6.1.10	-do-	S	-do-	-do-	-do-
7 Requirement for Flexible Pouches							
7.2	Water Potability Test	Annex E	-do-	S	-do-	Once in two months	Sample of each size shall be tested by rotation so that all the sizes shall be tested in one operative period.
7.3	Stack load Test	Annex F	-do-	R	-do-	One day production	If the sample does not conform to the requirement the same day production shall be rejected.
7.4	Drop test	Annex G	-do-	R	-do-	Every hour for each machine	If the sample does not conform to the requirement, the licensee shall follow the criteria for acceptance and retesting as per clause G-3 of IS 15609:2005. If it still does not conform then the same day production shall be rejected.
7.5	Ink Adhesion of Printed Pouches	Annex H	IS 15609	R	-do-	One day production	If the sample does not conform to the requirement the same day production shall be rejected. All rolls to be checked before using the same for making pouches. All such rolls which do not conform to the requirement shall be rejected.
7.6	Product resistance of printed Pouches	Annex J	-do-	R	One	-do-	-do-

Note-11: 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-12: The control unit and levels of control as decided by the Bureau are obligatory to which the licensee shall comply with.

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