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| **(PETROLEUM, COAL & RELATED PRODUCTS DEPTT.)** | | |
| **AGENDA** | | | |
| **Plastics Packaging Sectional Committee, PCD 21** | | | **38th Meeting** |
| **DATE & TIME** | | 11th November 2024, 1100 HRS | |
| **VENUE** | | Manak Bhawan, BIS HQRS, New Delhi | |
| **MODE** | | Physical Mode | |
| **CHAIRPERSON** | | Dr Babu Rao Guduri, Joint Director, IIP | |
| **MEMBER SECRETARY** | | Ms. Anmol Agarwal, Scientist-B, PCD, BIS  E-mail: [pcd21@bis.gov.in](mailto:pcd21@bis.gov.in) | |

**Item 0 OPENING OF THE MEETING**

**0.1** **Welcome Address by Bureau of Indian Standards**

**0.2** **Opening Remarks by the Chairperson**

**Item 1 CONFIRMATION OF MINUTES OF THE 37th MEETING OF PCD 21**

**1.1** The minutes of the 37th meeting of Plastics Packaging Sectional Committee, PCD 21 held on 31st January 2024 (Hybrid mode) were circulated via BIS portal on 9th February 2024. No comments have been received on the minutes.

The Committee may **CONSIDER** and **CONFIRM** the minutes as circulated, as no comments have been received on the minutes circulated.

**Item 2 THE PRESENT TITLE, SCOPE AND COMPOSITION OF PCD 21**

**2.1** The present title and scope of the Plastics Packaging Sectional Committee, PCD 21 are given below as:

**Title**: Plastics Packaging Sectional Committee

**Scope**: *Formulation of Indian Standards on rigid, semi-rigid and flexible plastics containers, closures and their methods of test and to coordinate with the work of ISO/TC 61 ‘Plastics’ and ‘ISO/TC 122 (Plastic Packaging only)’ so far as it concerns its own scope*.

The Committee may **NOTE.**

**2.2** The present composition of thePlastics Packaging Sectional Committee, PCD 21 are given below as:



The Committee may **CONSIDER** and **REVIEW** the composition**.**

**2.3** The present composition of Working group under Plastics Packaging Sectional Committee, PCD 21 are given below as:



**2.4** As per the direction from DG, BIS, organisations that have not attended three consecutive meetings are to lose their representation in the Technical Committee.



**2.5 Request for Representation in Plastic Packaging Sectional Committee, PCD 21.**

**2.5.1** *Mangalore Refinery and Petro Chemical Limited, Mangalore*

A request has been received from *MRPL* for representation in the Plastics Packaging Sectional Committee, PCD 21. As per the data received from *MRPL*, they have 440 KTA Polypropylene plant and in addition to this, MRPL is the only polyolefin manufacturer in South India capable of producing the complete range of PP Homo-polymer to cater to the entire range of various applications. Apart from conventional grades, *MRPL* also produces multiple value added and innovative PP products to cater specific niche segments. They have nominated Mr Nilanjan Guha (General manager), Narattam Chakraborty (Chief manager) and Puja Dey (Manager) to be a member of the committee. *MRPL* is already a member in various other BIS committees (ex- TXD 23, PCD 01, PCD 03, PCD 06, etc.) and have contributed in drafting of PE and PP specifications in IS 7328 and IS 10951 as an invitee member. The communication received is given below:



The Committee may **CONSIDER** to co-opt the organisation.

**2.5.2** *In Personal Capacity*

A request has been received from Shri Desai Girish Chintamani for representation in Plastics Packaging Sectional Committee, PCD 21. He has more than 41 years of experience in the field of polyester staple fiber, filament yarns, PET resins and Spinfinish. He has worked for more than 16 years in Reliance Industries Ltd. and got superannuated in October, 2023. During his tenure in Reliance Industries, he was successfully handling many assignments such as Providing end-to-end Product Stewardship to Polyester sector, Eco certification, REACH & other Regulatory compliance, etc. (*CV attached*).



The Committee may **CONSIDER** to co-opt.

**ITEM 3 ISSUES ARISING OUT OF PREVIOUS MEETINGS**

**3.1 Review/Revision of Indian Standards**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No. and Title** | **Decision during last meeting** | **Current Status** |
|  | **IS 12007: 1987 Specification for laminated collapsible tubes** | The Committee decided to issue the draft revision into wide circulation for a period of 2 months without any change. | While reviewing the draft revision, it has been observed that procedure for bond strength test for extruded and sleeve is still awaited from Essel Propack limited. |
| ii) | **IS 15749 : 2007 Fluorinated HDPE bottles and Containers-Specification** | The Committee NOTED the information provided by BIS Sectt. that fluorinated HDPE bottles are in use. After deliberations, Committee REQUESTED BIS Sectt. to collect additional data from major pesticides manufacturers regarding the extent of use of fluorinated HDPE bottles by writing to medium / largescale pesticides manufacturers and provide that information to **WG 1** for further actions. In case, these bottles are not in use, the standard may be archived. | Inputs are yet to receive from the industries.  However, BIS Sectt. carried out a study on the subject and it has been observed that fluorinated HDPE can be harmful to the environment and human health in several ways:   1. Polyfluoroalkyl substances (PFAS) are a class of chemical that are also called forever chemical because they can accumulate in the environment and in human body. 2. Significant levels of various PFAS can and do migrate from fluorinated HDPE containers into liquid stored within, including pesticides. |
| **iii)** | **IS 14636 : 1998 Flexible Packaging materials for packaging of edible oils , ghee and vanaspati** | The Committee NOTED the recommendations received from **WG 5** and DECIDED to issue the draft revision into wide circulation for a period of 2 months after incorporating the recommendations of **WG 5**. | While reviewing the draft revision, BIS sectt. observed few ambiguities which are attached as comments in the draft revision:    Resolution of comments under process. |
| **iv)** | **IS 11352 : 2018 Flexible pouches for the packing of vanaspati upto 2 kg or 2 litres – Specification (*third revision*)** | The Committee NOTED the recommendations received from **WG 5** and DECIDED to issue the draft revision into wide circulation for a period of 2 months after incorporating the recommendations of **WG 5**. | Draft is yet to be issued into wide circulation for a period of two months. |
| **v)** | **IS 10171:1999 Guide on Suitability of Plastics for Food Packaging (*second revision*)** | During the meeting, Shri Dhananjay Sahoo, the convenor of WG informed that there is a lack of expertise of the given subject in the WG.  The Committee DECIDED to invite experts from Mother dairy Fruits and Vegetables, ITC and Britannia to the WG. Shri Atin Chaudhury offered to provide details of the expert from Britannia.  Further, the Committee REQUESTED WG to provide the draft revision within 2 months. | Draft is still awaited from the working group. |

The Committee may **CONSIDER**.

**3.2 Formulation of Indian Standard on ‘Flexible Packaging’ for snack food.**

**Decision in the last meeting**: BIS Sectt. had gather the data of Indian standard containing packaging requirement of various snacks food items like ready to eat extruded snacks, fried jack fruit snacks, namkeen, etc. The Committee after detailed deliberations felt that more varieties/combinations of packaging material are in use now a days. Therefore, the Committee REQUESTED WG 5 to review the data and accordingly recommend the scope of the standard to be formulated within 2 months. Further, the Committee requested member secretary to share the soft copies of product standards relevant to the subject with the WG 5. The Committee also DECIDED to add Shri Rajeshwar Matche, CSIR-CFTRI to the WG 5 for his expertise in the subject.

**Present status:** No inputs has been received from WG 5**.**

Further,BIS has engaged few interns from Central Institute of Petrochemicals Engineering and Technology (CIPET) and allotted project for collection of data for the revision of the standard. As a part of internship project, new work item for flexible packaging of snacks food was allotted to an intern for collection of data. Following inputs were received from intern:

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The Committee may **CONSIDER**.

**3.3 Formulation of Indian Standard for the packaging of dairy products made of HDPE/PP containers.**

**Decision in the last meeting**: BIS Sectt. had gather the data containing packaging requirement of various dairy products like ghee, curd, yoghurt, skimmed powder, ice-cream, etc. given in their respective Indian standards. The Committee after detailed deliberations felt that more varieties/combinations of packaging material are in use now a days. Therefore, the Committee REQUESTED **WG 6** to review the data and accordingly recommend the scope of the standard to be formulated within 2 months. Further, the Committee requested member secretary to share the soft copies of product standards relevant to the subject with the **WG 6**. The Committee also DECIDED to add Shri Rajeshwar Matche, CSIR-CFTRI to the **WG 6** for his expertise in the subject.

**Present status:** No inputs has been received from WG 5**.**

The Committee may **CONSIDER**.

**3.4 Manufacturing of coloured feeding bottles using pigments and colorants.**

**Decision in the last meeting**: The Committee NOTED that last date of bidding in Research and Development project has been extended to 29/02/2024.

**Present Status:** The Research and development project titled “Study of Toxicological effect of colorants and pigments in plastics feeding bottle on infant health" had been commissioned and allotted to Indian Institute of Toxicological Research, Lucknow (IITR). Further, project leader had submitted the progress reports along with utilization certificate which were circulated to all the technical committee members of PCD 21 for their comments on 09/10/2024. Few comments were received from the members which were communicated to the project leader for the necessary actions.  Reply to the comments has also been received from the project leader (attached).



Approval regarding acceptance of progress report has been taken from the Chairperson (PCD 21) on behalf of the Sectional Committee.

The Committee may **NOTE.**

**3.5 Formulation of Indian Standard on test method for determination of Bisphenol A content in packaging material**

**Decision of the last meeting** — During the meeting, Committee DECIDED to endorse the recommendations of **WG 8** to formulate the standard based on /taking assistance from BS EN 14372-2004. The Committee REQUESTED **WG 8** to submit the draft within 2 months.

**Present status** — A Draft standard has been prepared after taking assistance from BS EN 14372-2004 and submitted to the WG 8. Further inputs are awaited from the **WG 8**.



The Committee may **CONSIDER**.

**3.6 Comment on IS 14625 Plastics Feeding Bottles**

In the last meeting, Committee requested WG 3 to review the following comment and test reports and provide recommendation.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. no. | clause | Commentor | Type of comment | Justification | WG recommendation |
|  | 5.3.6 | Pigeon | Technical | As per IS 14625, the  feeding bottles shall not  get deformed by more than 10 percent in  diameter in compressive  direction at the  compressive load of 2  kgf (19.6 N) when tested  in accordance with the  method described in  Annex E of IS 14625.  However, in case of  cleft palate squeezable  bottle, it is deforming 15  to 16 percent. Test  report is also submitted  by the commentator. | AGREED  Recommended to incorporate it as a separate category of bottle under IS 14625. |

The Committee may **CONSIDER**.

**Item 4 DRAFT STANDARDS/ AMENDMENTS FOR FINALIZATION**

**4.1 IS 8747: 1977 Methods of test for environmental stress - Crack resistance of blow -**

**moulded polyethylene containers**

**Decision of the last meeting** — The Committee Decided that ASTM D 2560-70, the standard on which IS 8747 was based, has been withdrawn and replaced by ASTM D 2561-17. The Committee after detailed deliberation DECIDED to endorse the recommendation of WG 2 that not to incorporate method 3 given in ASTM D 2561-17 in draft revision. Further, the Committee REQUESTED BIS Sectt. to circulate the draft revision along with ASTM D 2561-17 to all the members for their inputs regarding method I and II in the draft revision. If no comments received within one month, draft shall be finalised for printing with the approval of Chairman, PCD 21.

**Present Status**: Few comments were received as given below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Clause/Sub-clause/ para/table/fig. No. commented | Commentator/  Organization/  Abbreviation | Type of Comments  (General/Editorial/ Technical) | Justification | Proposed change/Suggestions |
| (1) | (2) | (3) | (4) | (5) | (6) |
|  | Foreword (3rd Para) Environmental stress cracking of blow-moulded containers is governed by many factors. It is summation of the influence of container design, resin, blow-moulding conditions and post treatment. | Mother Dairy Fruit and Vegetable Pvt. Ltd | Technical | Environmental stress cracking of blow-moulded containers is governed by many factors. It is summation of the influence of container design, resin, blow-moulding conditions and post treatment *or other factors* that can affect this property. | •Recommended highlighted texts are aligned with ASTM D2561-17.  •Other factors may include processing parameters, Additives etc. |
|  | Foreword (3rd Para)  Method III Controlled Elevated Pressure Stress Crack Resistance of a Specific Container to Polyoxyethylated Nonylphenol (CAS 68412-54-4), a Stress-Cracking Agent The internal pressure is controlled at a constant elevated level. | Technical | New Addition | •Recommended addition is aligned with ASTM 2561-17. |
|  | 3.2 Method II | Technical | Method II, shall be aligned with ASTM 2561-17. | •For more clarity |
|  | 9.2.1 Fill a minimum of 15 containers to one-third of overflow capacity (180 ml) with the stress cracking solution but described in 5.2.2. |  | 9.2.1 Fill a minimum of 15 containers to one-third of overflow capacity (~~180~~ 170 ml) with the stress cracking solution but described in 5.2.2 | For 500ml containers, one-third of overflow capacity will be 170 ml. |
|  | Significance and Use  When properly used, these procedures serve to isolate factors such as material, blow-molding conditions, post treatment, and so forth, on the stress-crack resistance of the container.  Environmental stress cracking of blow-molded containers is governed by many factors. Since variance of any of these factors can change the environmental stress-crack resistance of the container, the test results are representative only of a given test performed under defined conditions in the laboratory. The reproducibility of results between laboratories on containers made on more than one machine from more than one mold has not been established.  Results can be used for estimating the shelf life of blow-molded containers in terms of their resistance to environmental stress cracking provided this is done against a rigorous background of practical field experience and reproducible test data. | Technical | New Addition | •Recommended addition is aligned with ASTM 2561-17. |
|  | Addition of Precision & Bias points as per ASTM 2561-17. | Technical | New Addition | •To align with ASTM 2561-17. |
|  | Disposal mechanism of PONP chemical should be given. | Technical | We need to have proper disposal mechanism for disposal of hazardous chemical to avoid any health and safety concern. | •Environmental concern |
|  | 7.1 | T.R. Srikanth | Technical | 7 TEST SPECIMEN  7.1 For Method I — A minimum of 15 blow-moulded containers, representative of the lot to be tested, and each fitted with a screw closure affording a leak-proof seal shall be selected.  7.2 For Method II — A standard blow-moulded container shall be used for this test. It is a 500 ml cylindrical bottle weighing approximately 20 g, as shown in Fig. 1. A minimum of 15 containers shall be selected as in 7.1. The minimum wall thickness of the container shall be not less than 0.30 mm. The pinch-off area of the container shall not extend into the chime radius. | For applications in surfactants/surface active agent packaging, ESCR of the virgin raw materials as per ASTM D1693 is to be referred |

Wide circulation draft of IS 8747 is as given below:

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The Committee may **CONSIDER** for finalization of the document.

**4.2 IS 7803 (Part 1) : 1975 Specification for plastic containers for pharmaceutical use Part 1 Other than parenteral and ophthalmic preparations (*first revision*)**

**Decision in the last meeting**: The Committee NOTED that comments are awaited from Dr. Vijay Habbu. During the meeting, Dr. Vijay Habbu informed the Committee that he requires

expertise from pharmaceutical industry for providing comments. The Committee DECIDED

to add Shri Santanu Chowdhury from Sun Pharmaceutical to contribute his expertise in the

subject. Further, the Committee REQUESTED Dr. Vijay Habbu to provide comments within

1 month.

**Present Status**: Inputs are awaited from Dr. Vijay Habbu.

The Committee may **CONSIDER**.

**4.3 IS 7803 (Part 2) : 1975 Specification for plastic containers for pharmaceutical use Part 2 Parenteral and ophthalmic preparations**

**Decision in the last meeting**: The Committee NOTED that comments are awaited from Dr. Vijay Habbu. During the meeting, Dr. Vijay Habbu informed the Committee that he requires

expertise from pharmaceutical industry for providing comments. The Committee DECIDED

to add Shri Santanu Chowdhury from Sun Pharmaceutical to contribute his expertise in the

subject. Further, the Committee REQUESTED Dr. Vijay Habbu to provide comments within

1 month.

**Present Status**: Inputs are awaited from Dr. Vijay Habbu.

The Committee may **CONSIDER**.

**4.4 IS 14537: 1998 Polyethylene terephthalate (PET) bottles for packaging of alcoholic liquor.**

**Decision in the last meeting:** The Committee requested BIS Sectt to send the document for printing with the approval of Chairman, PCD 21, if no comments received.

**Present Status**: While reviewing the draft, WG realised that clause 7 that is Neck finish dimension has not been clarified clearly in the standard and creating ambiguity in the standard and also realised that it is not generally a requirement for plastic containers rather for glass bottles. Therefore, working group decided to modify clause 7 as given below:

“Neck finish for PET bottles with closures shall be as agreed between the purchaser and the supplier.”

The final draft, after the modification was approved by the chairman of PCD 21 and sent for printing.



The Committee may **NOTE**.

**4.5 IS 14764: 2000 Polyethylene terephthalate (PET) containers for Packaging of Vanaspati Specification**

**Decision of the last meeting** —The Committee requested BIS Sectt to send the document for printing with the approval of Chairman, PCD 21, if no comments received.

**Present Status**: While reviewing the draft  revision, Working group responsible for the preparation of draft revision deliberated that test condition is not mentioned in Storage stability test . Therefore, working group decided to modify the clause 9.8 as given below:

**''9.8 STORAGE STABILITY TEST**

**9.8.1** Storage stability test is meant to verify the suitability of the PET container for providing the desired shelf life to the content.

**9.8.2** The storage stability test shall be conducted keeping in mind the following:

**9.8.2.1** The conditions for testing non-refrigerated foods shall be:

a)       For standard condition at (27 ± 1) °C and (65 ± 2) percent RH at the end of 180 days; and

b)       For accelerated condition at (38 ± 1) °C and (90 ± 2) percent RH at the end of 60 days.

**9.8.3** It is the responsibility of the supplier to ascertain that the PET container can maintain quality and safety of the food content as specified by the food manufacturer over its entire shelf life. Quality and safety parameters should be as per the standard designated for the food content. In the absence of such standard, organoleptic properties and safety parameters such as rancidity, coliform count, yeast and mould content, as appropriate may be decided between the purchaser and the supplier. The food safety parameters shall meet the provisions of the applicable rules and regulations of the *Food Safety and Standards Act*, 2006.''

The final draft, after the modification is as given below:



The Committee may **CONSIDER** sending the draft for printing.

**4.6 IS 12887: 1989 Polyethylene terephthalate (PET) bottles for packaging of edible oils.**

**Decision of the last meeting** — The Committee decided to finalize the document for printing with the agreed changes and requested BIS sect. to send the document for printing with the approval of Chairman, if no more comments received on it.

**Present status** — While reviewing the comments received on the wide circulation draft, WG modified draft revision as decided by the Committee. However, few recommendations are made by the WG against the decision of the Committee are as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Clause/Sub-clause/para/table/fig. commented | Commentator/Organization/ Abbreviation | Type of comments(General/Editorial/ Technical) | Justification/ Comments | Decision of the Committee | WG recommendations |
|  | 11.4 and 11.6 | FRBO | Editorial | It would not be feasible to test it for all edible oils for a manufacturer of PET bottles for compliance because of the different compositions of various edible oils. | AGREED  The Committee DECIDED to delete clause no. 11.4 | WG opined that storage stability test is one of the most important requirement given in the standard and therefore, it recommended to modify the storage stability test conditions as given in draft. |
|  | Table 3 | Technical | Acetaldehyde (which is a carcinogenic) requirement may be added. | AGREED  The Committee REQUESTED WG 4 to add the requirement of Acetaldehyde in table 3. | WG deliberated and found that as of now, there is no regulation issued by FSSAI for requirement of acetaldehyde content in the standard. |
|  | 7.1.1 |  | Technical | For clarification, the neck should be identified | AGREED  The Committee requested WG 4 to clarify neck finish in clause no. 7.1.1 | WG recommended to delete the requirement of IS 7511 (Part 4) for the neck finish. |

Draft revision has been prepared after incorporating above recommendations of WG is as given below:



The Committee may **CONSIDER** sending the draft for printing.

**4.7 IS 9754: 1981 Specification for high density polyethylene containers for packing of liquid pesticides (Up to 1 litre Capacity).**

**Decision in the last meeting:** The Committee DECIDED to FINALISE the document for printing with agreed changes and requested BIS Sectt to send the document for printing with the approval of Chairperson.

**Present Status:** While reviewing the finalized draft revision at proof stage, BIS Sectt. observed that in the marking clause, requirement of recycle symbol has been given. As per Insecticides Rules 1971, pesticides container cannot be recycled or reuse.



Further, one comment has also been received as given below:



The Committee may **CONSIDER**.

**4.8 IS 15410: 2003 Plastics bottles/ containers for packaged natural mineral water and packaged drinking water — Specification**

**Decision of the last meeting** — The Committee REQUESTED **WG 7** to kindly review the draft revision in light of the comment received and submit the draft within 1 month. If no changes made in the draft, the Committee decided to finalise the draft for printing with the approval of Chairman.

**Present status** — Received comments were reviewed by the WG in its 8th meeting. Comments were raising objection against the changes made in the draft revision which prohibits the use of PVC in labels, sleeves, caps of Plastics container/ bottles for natural mineral water and packaged drinking water. In view of this, WG recommended to remove PVC restriction as it is not explicitly banned and label would be removed prior to recycling. In light of the recommendations made by WG, draft revision has been modified. Since, changes made in the draft revision is technical, so it was issued into Wide Circulation for 1 month with the approval of Chairperson (PCD 21).  Following comments were received from Indian Beverages Association are as given below:

|  |  |  |  |
| --- | --- | --- | --- |
| Clause | (Editorial/ Technical) | Justification | Proposed change |
| Clause 4.3/Subclause 4.3.3 | Technical | Reusable/Returnable containers (bigger jars) tend to have stains during transportation. In other words, because of multiple rounds of usage and transportation for refiling, it tends to have scuff marks and stains outside while the water quality inside container remains is maintained the same. | Insertion of the proviso at end of clause 4.3.3. –  Provided that the above clause does not apply to Reusable containers. |
| Clause 4.5 Wall Thickness | Editorial | Wall thickness varies within the body of the same bottle at various points. Design variations may lead to variations in the thickness at various places within the same bottle. Even two bottles produced on the same line shall have different thickness. The wall thickness can’t be uniform across the container and also there is no technical merit in declaration of the thickness by the manufacturer as its not giving any The wall thickness shall be declared by the manufacturer. The tolerance on wall thickness when measured in accordance with 4.5 of IS 2798 shall be – 2 percent of the declared value. No limit to the plus tolerance of wall thickness has been specified. technical information which can be utilized. This requirement should be left to the discretion of agreement between manufacturer and user. Therefore ,we propose deletion of this clause | ~~The wall thickness shall be declared by the manufacturer. The tolerance on wall thickness when measured in accordance with 4.5 of IS 2798 shall be – 2 percent of the declared value. No limit to the plus tolerance of wall thickness has been specified.~~ |
| Clause 5/Subclause 5.1c | General | We wish to seek clarity on this clause. The main heading of the clause 5 is regarding marking while the point c indicates information regarding packing slip which does not seem to be appropriate to this section. Moreover, it c) a packing slip in each consignment of containers/ closures shall include: 1) Nominal capacity – except for closures; and 2) Batch No. or Code No. is not clear whether this requirement is for empty or filled bottles. Instead of packing slip, it should be COA. Therefore, we propose deletion of Subclause 5.1c | ~~c) a packing slip in each consignment of containers/ closures shall include: 1) Nominal capacity – except for closures; and 2) Batch No. or Code No.~~ |
| Annex B Method of Test for Potability | Technical | 38°- 40°C temperature for continuous 30 days is too much exposure for product & packaging, considering the temperature in actual scenario is always cyclic. This may impact both quality of packaging or B-2 PROCEDURE Heat the water to a temperature of 38 °C ± 2 °C, and fill the container to its nominal capacity and closed tightly with the closure. Keep the container at 38 °C ± 2 °C, for a period of 24-48 hours 30 days. The container shall be opened after completion of 30 days of storage period and the water shall be examined for any disagreeable odour or smell. product and may not give a true indication of the expected test result. One option could be “keeping it at ambient temperature for longer duration” . Other option is to reduce the duration of storage at such high temperature. For testing potability. temperature used in always cyclic. | B-2 PROCEDURE Heat the water to a temperature of 38 °C ± 2 °C, and fill the container to its nominal capacity and closed tightly with the closure. Keep the container at 38 °C ± 2 °C, for a period of 24-48 hours ~~30 days.~~ The container shall be opened after completion of ~~30 days of~~ storage period and the water shall be examined for any disagreeable odour or smell. |

Wide circulation draft is attached as given below:



The Committee may **CONSIDER** and **FINALISE** the document.

**4.9 Plastic Feeding and Drinking Containers, Accessories and Cutleries for infant and**

**child use (new standard)**

**Decision in the last meeting:** The Committee FINALIZED the draft revision for printing as no comments were received on the wide circulation document.

**Present Status:** While reviewing the draft standard, BIS Sectt. found that there are few ambiguities in the draft standard Conflicts such as:

1. many containers under the scope of standard PCD 21(22060) coincides with IS 14625 Plastics Feeding Containers.
2. Standard also stipulates the requirements of containers, accessories and cutleries made up of silicone rubber which falls out of the scope of PCD 21.

A working group meeting was organized for deliberations on the above mentioned ambiguities. WG recommendations are as follows:

a) To add drinking and feeding containers under the scope of IS 14625 itself because most of the requirements are similar in both standards (IS 14625 and PCD21(22060)).

b) It has been decided to formulate a new standard only for plastic cutleries for children.

c) It has been decided that accessories, containers and cutleries made up of silicone does not fall under the scope of PCD 21, therefore, recommended to drop the formulation of Indian standard on cutleries, accessories and containers made of silicone rubber.



The Committee may **CONSIDER.**

**4.10 IS 7408 (Part 1) : 2000 Blow moulded polyolefin containers — Specification : Part 1 Up to 5 litres capacity (*second revision*)**

**Decision of the last meeting** — During the meeting, Shri T.R Srikant requested the Committee to provide one week time to provide his comments /recommendations on the draft. The Committee agreed for the same and requested BIS Sectt to share the draft revision with Shri T.R Srikant. If no comments/ recommendations received from Shri T.R Srikant within one week, the draft shall be considered as finalized for printing.

**Present status** —Following comments were received from Shri T.R Srikant:



Further, it is submitted that BIS had engaged few interns from Central Institute of Petrochemicals Engineering and Technology (CIPET) and allotted project for collection of data for the revision of the standard. This standard was allotted to an intern as a part of internship program. Following inputs were received from intern on IS 7408 (Part 1, 2 &3):



The Committee may **CONSIDER.**

**4.11 IS 7408 (Part 2) : 2000 Blow moulded polyolefin containers — Specification : Part 2 Over 5 litres up to and including 60 litres capacity (*first revision*)**

**Decision of the last meeting** — During the meeting, Shri T.R Srikant requested the Committee to provide one week time to provide his comments /recommendations on the draft. The Committee agreed for the same and requested BIS Sectt to share the draft revision with Shri T.R Srikant. If no comments/ recommendations received from Shri T.R Srikant within one week, the draft shall be considered as finalized for printing.

**Present status** —Following comments were received from Shri T.R Srikant:



Further, it is submitted that BIS had engaged few interns from Central Institute of Petrochemicals Engineering and Technology (CIPET) and allotted project for collection of data for the revision of the standard. This standard was allotted to an intern as a part of internship program. Following inputs were received from intern on IS 7408 (Part 1, 2 &3):



The Committee may **CONSIDER.**

**4.12 IS 7408 (Part 3) : 2000 Blow moulded polyolefin containers — Specification : Part 3 Closed head containers over 60 litres up to and including 250 litres capacity (*first revision*)**

**Decision of the last meeting** — During the meeting, Shri T.R Srikant requested the Committee to provide one week time to provide his comments /recommendations on the draft. The Committee agreed for the same and requested BIS Sectt to share the draft revision with Shri T.R Srikant. If no comments/ recommendations received from Shri T.R Srikant within one week, the draft shall be considered as finalized for printing.

**Present status** —Following comments were received from Shri T.R Srikant:

Further, it is submitted that BIS had engaged few interns from Central Institute of Petrochemicals Engineering and Technology (CIPET) and allotted project for collection of data for the revision of the standard. This standard was allotted to an intern as a part of internship program. Following inputs were received from intern on IS 7408 (Part 1, 2 &3):



The Committee may **CONSIDER.**

**4.13 IS 6312 : 1994 Polyethylene containers for the transport of materials — Specification (*second revision*)**

**Decision in the last meeting**: The Committee FINALIZED the draft revision for printing as no comments were received on the wide circulation document.

**Present Status**: It is submitted that BIS had engaged few interns from Central Institute of Petrochemicals Engineering and Technology (CIPET) and allotted project for collection of data for the revision of the standard. This standard was allotted to an intern as a part of internship program. Following inputs were received from intern:

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The Committee may **CONSIDER.**

**4.14 IS 7019 : 1998 Glossary of terms in plastics and flexible packaging, excluding paper (*second revision*)**

Decision of last meeting **––** The Committee decided to issue the draft revision into Wide circulation for a period of 2 months.

Present status **––** The draft revision was issued into wide circulation and last date of comment was 8th July 2023. Following comments has been received from the mother dairy:



The Committee may **CONSIDER.**

**4.15 IS 9738: 2003 Polyethylene bags for general purposes - Specification** (***second revision*)**

**Decision of the last meeting** — The Committee requested **WG 2** to review IS 9738 and provide the recommendation with 2 months.

**Present status** — WG 2 reviewed the standard and submitted the draft revision to the BIS Sectt. The Standard has been brought in line with PWM Rules, 2016 in terms of thickness of carry bags. As no major changes were done, draft revision was issued into wide circulation for one month with the approval of Chairperson (PCD 21). Following comments were received:



The Committee may **CONSIDER**.

**Item 5 DRAFT STANDARDS / AMENDMENTS FOR APPROVAL FOR WIDE CIRCULATION**

**5.1 IS 12395:1998 Disposable trash bags of plastics**

**Decision of last meeting** – The Committee requested **WG 2** under the convenorship of Shri Manish Khandelwal to provide the draft revision within 2 months for the consideration of the Committee.

**Present Status** – The **WG 2** has submitted the draft revision in which changes are highlighted in red as below:



**5.2** **IS 13123 : 2000 Packing of liquid pesticides – Polyethylene terephthalate (PET) bottles (up to 5 litres capacity) (*first revision*)**

**Decision of last meeting:** During the meeting, Dr. Vijay Habbu informed the Committee that draft is almost ready but inputs from expert are awaited. Further, the Committee REQUESTED Dr. Vijay Habbu, convenor of **WG 4** to provide the draft revision within 1 month.

**Present Status:** Draft has been received from **WG 4**.



**5.3** **IS 2798 :1998 Method of test for plastics container**

**Decision of last meeting:** During the meeting, Shri Rajeshwar Matche, the convenor of **WG 7** informed that there is a lack of expertise of the given subject in the **WG 7.** Therefore, Committee decided to invite members from *Shriram Institute for Industrial Research* and *Presto Stantest Pvt. Ltd.* in the **WG 7**. Further, Committee REQUESTED **WG 7** to provide the draft revision within 2 months.

**Present status:** Draft has been received from the WG 7 as given below:



The Committee may **CONSIDER.**

**Item 6 NEW WORK ITEM PROPOSAL**

**6.1 Polyethylene flexible pouches for the packing of natural mineral water and packaged drinking water**

**Decision in the last meeting** — The Committee DECIDED to circulate the proposal to all members and requested them to provide their comments/recommendations within 15 days. Once comments/recommendations are received, it will be forwarded to WG 7 for the deliberations on comments.

**Present Status**: The new work item proposal was circulated to all the members via mail dated 12th Feb 2024. No comments were received. Working group meeting was organized to review the proposal. After detailed deliberation, the working group (WG) recommended creating a new standard due to the following reasons:

1. The product includes a box for the PE pouch which isn't covered in the existing standard of IS 15609.
2. It also contains a spout, which is not covered in the current standard.
3. The Polyethylene pouch is laminated or multilayered, with varying forms, sizes, and properties, making it incompatible with the existing tests and requirements of IS 15609.

Therefore, due to these complexities, a new standard has been recommended for Bag in Box by the working group.

The Committee may **CONSIDER.**

**Item 7 PROGRAMME OF WORK**

**7.1** The program of work of the Committee is given below.



The Committee may **NOTE**.

**7.2 Review / Reaffirmation**

|  |  |  |  |
| --- | --- | --- | --- |
| *IS No.* | *Title* | *Last Reaffirmation Year* | *Due Date* |
| IS 10171 : 1999 | Guide on suitability of plastics for food packaging (Second Revision) | 2020 | June, 2025 |
| IS 10840 : 1994 | Blow moulded HDPE containers for packing of vanaspati - Specification (Second Revision) | 2020 | June, 2025 |
| IS 12512 : 1989 | HDPE containers - For liquid pesticides - Capacity over 1 and up to 5 litres - Specification | 2020 | June, 2025 |
| IS 12724 : 2004 | Flexible pouches for packing of refined edible oils up to 5 kg or 5 litre - Specification (First Revision) | 2020 | June, 2025 |
| IS 12787 : 1989 | Polyethylene air bubble film - Specification | 2020 | June, 2025 |
| IS 13123 : 2000 | Packing of liquid pesticides - Polyethylene terephthalate (PET) bottles (Up To 5 Litres Capacity) - Specification (First Revision) | 2020 | June, 2025 |
| IS 14764 : 2000 | Polyethylene terephthalate (PET) containers for packaging of vanaspati - specification | 2020 | June, 2025 |
| IS 15473 : 2004 | Blow moulded HDPE containers for packaging of edible oils - Specification | 2020 | June, 2025 |
| IS 15532 : 2004 | Plastics crates for fruits and vegetables - Specification | 2020 | June, 2025 |
| IS 15609 : 2005 | Polyethylene flexible pouches for the packing of natural mineral water and packaged drinking water - Specification | 2020 | June, 2025 |
| IS 6312 : 1994 | Polyethylene containers for the transport of materials - Specification (Second Revision) | 2020 | June, 2025 |
| IS 7408 (Part 1) : 2000 | Blow moulded polyolefin containers - Specification: Part 1 : up to 5 litres capacity (Second Revision) | 2020 | June, 2025 |
| IS 7408 (Part 2) : 2000 | Blow moulded polyolefin containers - Specification: Part 2 : over 5 litres, up to and including 60 litres capacity (First Revision) | 2020 | June, 2025 |
| IS 7408 (Part 3) : 2000 | Blow moulded polyolefin containers - Specification: Part 3 : closed head containers over 60 litres, up to and including 250 litres capacity (First Revision) | 2020 | June, 2025 |
| IS 8688 : 1988 | Plastics bottles for potable water - Specification (Second Revision) | 2020 | June, 2025 |
| IS 8747 : 1977 | Methods of test for environmental stress - crack resistance of blow - Moulded polyethylene containers | 2020 | June, 2025 |
| IS 9738 : 2003 | Polyethylene bags for general purposes - Specification (Second Revision) | 2020 | June, 2025 |
| IS 14625 : 2015 | Plastics Feeding Bottles (First Revision) | 2020 | June, 2025 |
| IS 14625 (Part 1) : 2015 | Plastics Feeding Bottles ( First Revision ) | 2020 | June, 2025 |
| IS 17480 : 2020 | High density polyethylene multi squeezable tube for packaging - Specification | - | March, 2025 |

**7.4 Review/Revision of Pre 2000 Standards**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **IS No.** | **Committee’s Decision** | **Present Status** |
| 1 | IS 12512 : 1989  HDPE containers — For liquid pesticides — Capacity over 1 and up to 5 litres — Specification | The Committee REQUESTED **WG1** to review IS 12512 and provide recommendations/ drafts within 2 months.  The Committee REQUESTED BIS Sectt. to add experts from pesticides industries to the WG 1. | No recommendation has been received from the WG 1. |
| 2 | IS 12787 : 1989  Polyethylene air bubble film — Specification | The Committee REQUESTED **WG 2** to review IS 12787 and provide recommendations/ drafts within 2 months.  The Committee DECIDED to add expert from Shriram Institute for Industrial Research to provide expertise in the subject. | No recommendations/ draft has been received from WG.  Further, it is submitted that BIS had engaged few interns from Central Institute of Petrochemicals Engineering and Technology (CIPET) and allotted project for collection of data for the revision of the standard. This standard was allotted to an intern as a part of internship program. Following inputs were received from intern : |
| 3 | IS 8688 : 1988  Specification for plastics potable water bottles (*first revision*) | The Committee NOTED item 7.4 (4) of the agenda and REQUESTED **WG3** to review IS 8688 and provide recommendations/ drafts within 2 months. | No recommendations/ draft has been received from WG. |
| 5 | IS 10840 : 1994 Blow moulded HDPE containers for Packing of Vanaspati — Specification (*second revision*) | The Committee NOTED item 7.4 (5) of the agenda and REQUESTED **WG1** to review IS 10840 and provide recommendations/ drafts within 2 months.  The Committee REQUESTED BIS Sectt. to add experts from pesticides industries to the **WG 1.** | No recommendations/ draft has been received from WG. |

The Committee may **CONSIDER.**

**8 COMMENTS ON STANDARDS**

**8.1 Comments on IS 14625: 2015 Plastics Feeding Bottles**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Clause / sub-clause** | **Commentator** | **Type of Comments** | **Justification** | **Proposed change/Suggestions** |
| 1. | 4 | Shri Gopal Sharma from Pigeon | Technical | We have identified PPSU bottles as a promising addition to our product portfolio, particularly being BPA (Bisphenol A) and BPS (Bisphenol S) free. Furthermore, we have gathered information from the U.S. Food and Drug Administration (FDA) regarding the clearance of Duradex® polyphenylsulfone resin for use in food contact applications under Food Contact Notifications (FCNs) 83 and 1215.  According to the FDA, FCN 83, effective since September 23, 2000, and FCN 1215, effective since November 15, 2012, permit the use of Duradex® polyphenylsulfone resin in repeated use food contact applications with all food types, subject to FDA conditions of use outlined in 21 CFR 176.170(c). This clearance signifies the safety and suitability of PPSU for food contact applications. | Need to add the "PPSU" Raw materials in the list. |

The Committee may **CONSIDER.**

**Item 9 DATE AND PLACE OF NEXT MEETING**

**Item 10 VOTE OF THANKS**