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| **(PETROLEUM, COAL & RELATED PRODUCTS DEPTT.)** | | |
| **MINUTES** | | | |
| **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) | |

***(Members attended: List is attached as Annex I)***

**Item 0 OPENING OF THE MEETING**

* 1. **Welcome Address by Bureau of Indian Standards**

On behalf of BIS, Ms. Anmol Agarwal, Member Secretary, extended a warm welcome to all members attending the 38th meeting of the Plastics Packaging Sectional Committee, PCD 21. She expressed her sincere gratitude to everyone for joining the meeting in person. She emphasized on environmental challenges caused by excessive plastic use, such as water pollution and harm to marine life. Therefore, she urged all members to take these concerns into account while formulating standards.

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

Dr. Babu Rao Guduri, Joint Director of IIP, welcomed all committee members to the 38th meeting of PCD 21. He emphasized that today’s primary focus is on addressing the environmental challenges posed by plastics, particularly in the areas of sustainability, recyclability, and biodegradability, which are well recognized by all. He acknowledged the expertise of the sectional and working group committees in proposing effective solutions and developing standards that will benefit both society and the nation. He expressed his anticipation of valuable contributions from all members and hoped for a productive outcome by the end of the meeting.

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

**1.1** The Committee NOTED item 1 of the agenda and CONFIRMED the minutes of the 37th meeting of Plastics Packaging Sectional Committee, PCD 21 as circulated, as no comments were received on the same.

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

**2.1** The Committee NOTED item 2.1 of the agenda and DECIDED to modify the scope of the Plastics Packaging Sectional Committee as given below:

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

**2.2** The Committee REVIEWED the composition of the technical committee and DECIDED as follows:

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| --- | --- |
| Name of the organization | Decision of the Committee |
| Chemical and Petrochemicals Manufacturers Association | Decided to seek fresh nomination from Chemical and Petrochemicals Manufacturers Association as Shri Uday Chand representing CPMA has been superannuated. |
| Sumitomo Chemical India Limited | Decided to WITHDRAW the organization as no response has been received regarding nomination after multiple reminders by BIS sect. |

**2.3** The Committee REVIEWED the composition of the working groups and decided as follows:



**2.4** The Committee noted item 2.3 of the agenda which stipulates that organizations failing to attend two consecutive meetings will forfeit 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*

The Committee noted item 2.5.1 of the agenda about the request that has been received from *Mangalore Refinery and Petro Chemical Limited* for representation in PCD 21. After deliberations, the Committee decided to **Co-opt** *Mangalore Refinery and Petro Chemical Limited* as member.

**2.5.2** *In Personal Capacity*

The Committee noted item 2.5.2 of the agenda about the request that has been received from Shri Desai Girish Chintamani for representation in PCD 21. After deliberations, the Committee decided to **Co-opt** Shri Desai Girish Chintamani in personal capacity as a member of PCD 21.

**2.5.3** *Nestle India Limited*

The Committee noted item 2.5.3 of the agenda about the request that has been received from *Nestle India Limited* for representation in PCD 21. The Committee observed that the membership of the organization was terminated earlier for absence in two consecutive meetings. After detailed deliberation, Committee DECIDED to **co-opt** Nestle India Limited as a member of PCD 21 and requested Nestle India Limited to adhere to the latest guidelines of the BIS for the technical committee members. Further, the Committee requested Nestle India Limited to submit an undertaking in this regard.

**2.5.4** *Mipa Industries*

The Committee noted item 2.5.4 of the agenda and DECIDED not to Co-opt the MIPA Industries.

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

**3.1 Review/Revision of Indian Standards**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **IS No. and Title** | **Committee’s Decision** |
|  | **IS 12007: 1987 Specification for laminated collapsible tubes** | The Committee noted that inputs have been received from Essel Propack Limited and requested BIS Sectt to issue the draft revision into wide circulation for two months. |
| ii) | **IS 15749: 2007 Fluorinated HDPE bottles and Containers-Specification** | The Committee noted BIS observations and DECIDED to archive the standard. |
| **iii)** | **IS 14636: 1998 Flexible Packaging materials for packaging of edible oils, ghee and vanaspati** | The Committee noted that draft is under review by the WG 5 as few queries have been raised by BIS Sectt. The Committee requested WG 5 to resolve the comments and submit the draft revision to BIS within 2 months. |
| **iv)** | **IS 11352 : 2018 Flexible pouches for the packing of vanaspati upto 2 kg or 2 litres – Specification (*third revision*)** | The Committee requested BIS Sectt. to issue the draft revision into wide circulation for a period of 2 months without any changes. |
| **v)** | **IS 10171:1999 Guide on Suitability of Plastics for Food Packaging (*second revision*)** | The Committee noted that due to lack of experts, draft revision has not been completely reviewed by the WG 9. Considering the reason for delay, the Committee recommended WG 9 to invite Adani Wilmar, Manjushree, ITC in the WG 9 meetings for their inputs. In this regard, the Committee requested Bisleri and Nestle to provide relevant contact details to BIS.  Further, the Committee requested WG 9 to provide the draft revision within 2 months. |

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

The Committee noted item 3.2 of the agenda regarding the inputs received from interns. During the meeting, Shri Alakesh Ghosh, HMEL requested the Committee to conduct R& D on the subject matter as there is lack of data available to members regarding the use of varieties of flexible packaging for snack food. In view of this, Committee decided to conduct R and D on the subject and requested **WG 5** to prepare Terms of Reference (TOR) for the project and submit to the Committee within 2 months. Once TOR will be submitted by **WG 5**, Committee requested BIS Sectt. to circulate TOR to all the members for 15 days.

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

The Committee noted item 3.3 of the agenda. During the meeting, Shri Alakesh Ghosh, HMEL requested the Committee to conduct R& D on the subject matter as there is lack of data available to members regarding the use of varieties of packaging materials for dairy products. In view of this, Committee decided to conduct R and D on the subject and requested **WG 6** to prepare Terms of Reference (TOR) for the project and submit to the Committee within 2 months. Once TOR will be submitted by **WG 5**, Committee requested BIS Sectt. to circulate TOR to all the members for 15 days.

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

The Committee noted item 3.4 of the agenda. Dr. Rachana Kumar (Principal Scientist-CSIR-IITR), project leader attended the meeting with the approval of Chairperson (PCD21). During the meeting, she presented current status of the R and D project-0094 to the Committee and requested for an extension of the project duration, without additional funds. The following reasons were cited by her for the extension request:

1. At the first stage, industries and laboratories were not responding to the queries of project team and therefore, there was a delay of around one month in obtaining information through questionnaires and visits which was to be carried out and therefore delay in collecting samples.

1. This project covers systemic injection on animal model which requires Institutional Animal Ethics Committee (IAEC) approval. She informed that proposal has been submitted to the ethical committee for clearance. However, IAEC approval is still pending.
2. She informed the committee that the project team is conducting toxicological study on as much colourants as available in the market. As of now, five different varieties of colours have been surveyed in the market and samples have been collected from 5 different sources for different colours. Each study will take at least 3 weeks that is 21 days and therefore, for conducting studies on 5 different colourants, it will take approximately 105 days that is 3.5 months which would be started after getting IAEC approval for systemic injection.

Further, she informed that the project team has completed global migration test, heavy metals, specific migration test for metals and phthalates, pigment leaching test for five different varieties of colourants except toxicity test by systemic injection which is pending. For conducting toxicity test by systemic injection, IAEC approval expected by the end of November. She assured that she will be able to submit the comprehensive report with each experiment conducted in detail by the end of March 2025 positively.

The Committee noted the present status of the project as informed by the project leader. During the deliberations, the Committee observed that the toxicity test is one of the most important aspects of this toxicological study as it will help to assess the effects of chemicals in colourants on infant health which are vulnerable section of the society. The members opined that the prime objective behind conducting the study is to collect technical and scientific evidence in regard to toxicological effect of colourants and pigments in plastics feeding bottle, and since, as informed by project leader, IAEC approval is pending, toxicity test could not be started. The Committee after detailed deliberations agreed to the request of the project leader for extension of the duration of project. However, the Committee noted that as per Doc no. SCMD/R&D Guidelines/20240522, the Committee is empowered to extend the duration of the project by not more than two months. Considering reasons for delay and assurance given by the project leader to submit the comprehensive report with detailed experiment studies, the Committee opined that the period of six months sought by the project leader is reasonable. Therefore, the Committee recommended the same and advised BIS Sectt to put up the proposal for extension for 6 months that is from 6th October 2024 to 5th April 2024 to the Competent Authority without any additional funds.

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

The Committee noted item 3.5 of the agenda that Draft standard has been prepared after taking assistance from BS EN 14372-2004 and submitted to the **WG 8**. The Committee REQUESTED **WG 8** to submit the final draft within 2 months.

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

The Committee noted item 3.6 of the agenda and DECIDED to endorse the recommendations to incorporate cleft palate bottle as a separate category of bottle under IS 14625.Further, the Committee requested **WG 3** to review IS 14625 and incorporate changes as recommended.

**3.7 Requirement of ageing resistance test in PP feeding bottle**

The Committee noted item 3.7 of the agenda that R & D project code-0006 titled as “Study the performance requirement of ageing resistance test in PP feeding bottle” had been commissioned to Dr. Vijaylakshmi Gosu, Assistant Professor, MNIT, Jaipur on 27/09/2024. Dr. Vijaylakshmi Gosu, project leader attended the meeting with the approval of Chairperson (PCD 21). During the meeting, she presented current status of the R &D project to the Committee and requested for an extension of the project duration, without additional funds. The following reasons were cited by her for the extension request:

1. At the first stage, manufacturers, exporters, importers were not responding to the queries of project team and therefore, there was a delay of around one month in obtaining information through questionnaires and planning visits which was to be carried out and therefore delay in collecting samples.
2. This project covers the collection of samples having same manufacturing date and then subsequent ageing tests which has required more time than anticipated to ensure the accuracy and quality of results.

Further, she informed that the project team has carried out literature review, identified manufacturers, importers and exporters of the Polypropylene feeding bottles. The team has planned the visits and prepared questionnaires and selected laboratories for ageing resistance test. She assured the committee members that the extension for two months will allow the team to complete all tasks thoroughly and deliver reliable and high-quality outcomes.

The Committee noted the present status of the project as informed by the project leader. During the deliberations, the Committee observed that the project was commissioned for two months, therefore, submission of final report was expected by 26/11/2024 from the project team. However, till that day even testing has not been started by the project team. The Committee showed deep concern as project should not have required more than 2 months duration. However, considering reasons for delay and assurance given by the project leader to submit the comprehensive report and high-quality outcomes, the Committee decided to provide 2-month extension to the project team and requested to submit mid-term report by 10/12/2024 to BIS Sectt. and requested BIS Sectt to circulate report to all members once received.

**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**

The Committee noted that few comments were received on wide circulation document and decided to incorporate following agreed changes:

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| --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Clause/Sub-clause/ para/table/fig. No. commented | Commentator/  Organization/  Abbreviation | Type of Comments  (General/Editorial/ Technical) | Justification | Proposed change/Suggestions | Committee’s Decision |
|  | 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. | Not Agreed  The Committee decided not to add “*or any other factors*” in 3rd paragraph as it is not needed. |
|  | 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. | Not Agreed  The Committee in its 37th meeting decided not to include method III in the standard. |
|  | 3.2 Method II | Technical | Method II, shall be aligned with ASTM 2561-17. | •For more clarity | Not Agreed  Method II is already aligned with ASTM 2561-17. |
|  | 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. | Technical | 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. | Not Agreed  Clause 9.2.1 stipulates one third of over flow capacity, however, 500 ml is the nominal capacity. |
|  | 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. | Not Agreed  The Committee decided not to add as it is not needed. |
|  | Addition of Precision & Bias points as per ASTM 2561-17. | Technical | New Addition | •To align with ASTM 2561-17. | Not Agreed  The Committee decided not to add precision and bias as it is implicitly mentioned during testing procedure. |
|  | 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 | Agreed  The Committee decided to add a note as mentioned below:  NOTE —I There are environmental concerns regarding the disposal of  Polyoxyethylated Nonylphenol (Nonylphenoxy poly(ethyleneoxy) ethanol  (CAS 68412-54-4), for example, Igepal CO-630). Users are advised to consult their supplier or local environmental Office and follow the guidelines provided for the proper disposal of this chemical.  AGREED |
|  | Clause7.1 | 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 | Agreed |

Further, the Committee DECIDED to finalise the document with above agreed changes and requested BIS Sectt to send the draft revision for printing with the approval of Chairperson.

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

The Committee noted that Dr. Vijay Habbu identified ambiguity in the draft but mentioned that it has not yet been fully reviewed. BIS Sectt informed the Committee that he has provided comments on the draft but requires input from pharmaceutical industry experts to finalize his feedback. During the meeting, the Committee requested **WG** 10 to review comments and modify draft revision accordingly and to provide draft revision within two months.

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

The Committee noted that Dr. Vijay Habbu identified ambiguity in the draft but mentioned that it has not yet been fully reviewed. BIS Sectt informed the Committee that he has provided comments on the draft but requires input from pharmaceutical industry experts to finalize his feedback. During the meeting, the Committee requested WG 10 to review comments and modify draft revision accordingly and to provide draft revision within two months.

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

The committee noted item 4.4 of the agenda that WG recommended to modify clause 7 of the draft revision. After Deliberation, the Committee DECIDED to endorse the recommendations of WG and requested BIS Sectt. to send the draft revision for printing with agreed changes with the approval of Chairperson.

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

The committee noted item 4.5 of the agenda that WG recommended to modify clause 9.8 of the draft revision. After Deliberation, the Committee DECIDED to endorse the recommendations of WG and requested BIS sectt. to send the draft revision for printing with agreed changes with the approval of Chairperson.

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

The committee noted the recommendations of the WG against the decision of the Committee in 37th meeting regarding the comments received from Faridabad Branch Office, BIS. After Deliberation, the Committee DECIDED to endorse the recommendations of WG and requested BIS Sectt. to send the draft revision for printing with agreed changes with the approval of Chairperson.

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

The Committee noted item 4.7 of the agenda that few comments have been received on the finalized draft revision which is at proof stage. After detailed deliberation on comments, Committee decided as given below:

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| --- | --- | --- | --- | --- |
| Clause | Type of comments | Justification/ Comments | Proposed change | Decision of the Committee |
| Clause 4.1.1 | Technical | 4.1.1 The high-density polyethylene (HDPE) satisfying following parameters and performance criteria as per clause 4 of this standard shall be used in fabrication of containers. Melt Flow Index (190 °C / 5 Kg) as per clause 5.2.1.2 of IS 7328: ≤ 2.0 g/10 min Melt Flow Index (190 °C / 2.16 Kg) as per clause 5.2.1.2 of IS 7328: ≤ 0.7 g/10 min Density at 23°C or 27 °C – as per clause 4.2.5.1 of IS 7328: > 940 to ≤ 960 | As per IS 7328: 2020 Clause 3.3 High Density Polyethylene density greater than 940 kg/m3.  Density should be considered either >940 kg/m3 or the entire range of density mentioned in IS 7328:2020 i.e > 940 kg/m3 to >965 kg/m3  Unit of density is not mentioned in 4.2.5.1  Unit should be kg/m3 | Agreed |
| Clause 5.2 | Technical | 5.2 Stress Crack Resistance Test The container when tested as per method 1 of IS 8747 shall have F 50 value not less than 360 hours. | ESCR will be as agreed between the purchaser & supplier.  ESCR tested as per ASTM D1693 should be referred for selection of HDPE grade to be used for packaging of surfactants / surface active agents. | Agreed |
| Clause 8.3 | Technical | In the standard, in clause 8.3, it is written as “the following recycle code for HDPE” which is wrong as pesticides container can’t be recycled at any way. | It can be replaced by “The following material identification code” | Agreed  The Committee requested BIS Sectt to give the reference of government guidelines for the safe disposal of the used bottle also. |

Further, the Committee requested BIS Sectt to send the draft revision for printing after incorporating above agreed changes, with the approval of Chairperson.

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

The Committee noted item 4.8 of the agenda that few comments have been received during wide circulation. After detailed deliberation on comments, the Committee DECIDED as given below:

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| --- | --- | --- | --- | --- |
| Clause | Type of comments | Justification/ Comments | Proposed | Decision of the Committee |
| 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. | Not agreed  The Committee decided to retain subclause 4.3.3 as reusable containers shall also be free from stains, cavities, crevices, flaws, etc. |
| 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. | Not agreed  The Committee decided not to keep plus tolerance of wall tolerance as it is not required. |
| 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. | Not agreed  The clause 5 is named as “Marking and Packing”. |
| 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. | Not agreed  The Committee decided not to change the test duration as it is an important requirement for testing the potability and 30 days of storage period is required to check potability. |
| Clause 4.1.4  BIS Sect. Observation | General | *Labels, Stickers, Sleeves*  Components for display such as but not limited to labels, stickers shall be of materials. | Remove the *Labels, Stickers, Sleeves Clause* | Agreed |

Further, the Committee requested BIS Sectt to send the draft revision for printing after incorporating agreed changes, with the approval of Chairperson.

**4.9 Plastic Feeding and Drinking Containers, Accessories and Cutleries for infant and child use (new standard)**

The Committee noted item 4.9 of the agenda that few recommendations have been received from **WG 3**. After deliberations on the recommendations, the committee decided to drop the document PCD 21(22060) from printing and requested **WG 3** to formulate a new standard only for plastic cutleries for children. Further, the committee requested **WG 3** to add drinking and feeding containers under the scope of IS 14625 itself as most of the requirements as stipulated in PCD 21(22060) are similar to IS 14625. In view of above and item 3.6, the Committee requested WG 3 to provide draft revision within 3 months.

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

The Committee noted item 4.10 of the agenda that comments have been received from intern and Shri T.R Srikant. The committee requested **WG 1** to review comments and provide the draft revision within 2 months.

**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*)**

The Committee noted item 4.11 of the agenda that comments have been received from intern and Shri T.R Srikant. The committee requested **WG 1** to review comments and provide the draft revision within 2 months.

**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*)**

The Committee noted item 4.12 of the agenda that comments have been received from intern and Shri T.R Srikant. The committee requested **WG 1** to review comments and provide the draft revision within 2 months.

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

The Committee noted item 4.13 of the agenda that comments have been received from intern. Further, BIS sect informed the committee that this standard is based on AS 1936-1976 which has now been revised to AS 2767-1994. In view of above, committee requested **WG 10** to review the draft revision and provide the draft revision within 2 months.

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

The Committee noted item 4.14 of the agenda that comments have been received Mother dairy. After detailed deliberations, the committee requested Mother Dairy to incorporate the comments and provide draft revision within 2 months.

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

The Committee noted item 4.15 of the agenda that draft revision was issued into wide circulation for one month and few comments were received as given below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Clause/Sub-clause | Type of Comments | Justification | Proposed change/Suggestions | Decision of the Committee |
| 1 Scope  para 1 | Technical | The scope of this wide circulated draft - PCD 21 (25951) WC June 2024 - Polyethylene Bags for General Purpose is for polyethylene bags intended for household carry home purpose & in nurseries. However, apart from this, polyethylene bags have wide range of applications such as in R & D, laboratories, academia, pharmaceuticals & chemical industries, medical sectors as mentioned below.  Specific applications of polyethylene bags are:  1. Storage and transfer of specimens in labs  2. Safe storage of lab items to prevent particulate contamination and leakage  3. Deep freezing of samples & stuffs even in liquid nitrogen  4. Disposal of biohazards (disposing of used tips, tubes, syringes etc.) 5. Sterile polyethylene bags specifically intended for microbiological applications  6. Polyethylene bags used as primary, secondary packaging material  The current wide circulated draft - PCD 21 (25951) WC June 2024 - Polyethylene Bags For General Purpose doesn't have clarity about polyethylene bags utilized in above listed specific applications. Additionally, such kind of bags share the similar HS code as polyethylene bags intended for household purposes and nurseries which further have a concern during custom clearance if this standard becomes mandatory in future.  Therefore, polyethylene bags used for above mentioned applications shall be excluded from the scope of the wide circulated draft - PCD 21 (25951) WC June 2024 - Polyethylene Bags For General Purpose. | This standard specifies the requirements and methods of sampling and testing for polyethylene bags used as carry-home bags for household items and open-ended bags by nurseries. This standard does not cover the plastic material that comes in direct contact with food, and polyethylene bags intended for applications in R & D, laboratories, academia, pharmaceuticals & chemical industries, and medical sectors. | Not Agreed |

The committee requested BIS sect to send the draft revision for printing, with the approval from chairperson.

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

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

The Committee requested WG 2 under the convenorship of Shri Gopal Sharma, GAIL to provide the draft revision within 2 months for the consideration of the Committee.

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

The Committee noted that draft revision has been received from WG 4. After deliberations on the draft revision, Committee decided to give the reference of government guidelines for the safe disposal of the bottle and requested BIS Sectt. to issue the draft into wide circulation for two months after incorporating agreed changes.

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

The Committee requested BIS sectt. to issue the draft revision into wide circulation for a period of 2 months.

**Item 6 NEW WORK ITEM PROPOSAL**

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

After detailed deliberations on the recommendations of WG 7 regarding formulation of new standard for bag in box, the Committee DECIDED to endorse the recommendation of WG for developing a new standard for Bag in Box.The Committee REQUESTED **WG 7** to provide the working draft within 2 months and requested BIS Sectt. to circulate it as p-draft to all members.

**6.2 PLASTIC CORE TRAY**

The Committee noted item 6.2 of the agenda that a new work item proposal has been received from Ms. Dipika Agarwal, HP Polymers Pvt. Ltd. on the subject “Plastic Core Tray”. After deliberations on the subject, the Committee requested BIS Sectt. to collect data regarding the manufacturing base of the product, users of the product and testing laboratory.

**Item 7 PROGRAMME OF WORK**

**7.1** The Committee NOTED item 7.1 of the agenda about the present state of activities going under PCD 21.

**7.2 Review / Reaffirmation**

The Committee NOTED the item 7.2 of the agenda and decided as given below.

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

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

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **IS No.** | **Committee’s Decision** |
| 1 | IS 12512 : 1989  HDPE containers — For liquid pesticides — Capacity over 1 and up to 5 litres — Specification | The Committee requested **WG1** to provide recommendations/ drafts within 2 months. |
| 2 | IS 12787 : 1989  Polyethylene air bubble film — Specification | The Committee noted that comments has been received on the standard and inputs are awaited from the WG 2. The Committee requested **WG 2** to review comments and provide recommendations/ drafts within 2 months. |
| HE | IS 8688 : 1988  Specification for plastics potable water bottles (*first revision*) | The Committee requested **WG3** to provide recommendations/ drafts within 2 months. |
| 4 | IS 10840 : 1994  Blow moulded HDPE containers for Packing of Vanaspati — Specification (*second revision*) | The Committee requested **WG10** to provide recommendations/ drafts within 2 months. |

**8 COMMENTS ON STANDARDS**

* 1. **Comments on IS 14625: 2015 Plastics Feeding Bottles**

The Committee noted item 8.1 of the agenda that comment has been received from Pigeon regarding the inclusion of PPSU in the material list of IS 14625. After detailed deliberations, the Committee requested BIS Sectt. to circulate the proposal for 1 month to all members and requested Pigeon to provide the data regarding recyclability of the material.

**8.2** The Committee noted item 8.2 of the agenda regardingthe study report submitted by Chemco Plastic Industries on “Requirement of ageing resistance test in PP feeding bottle”. The Committee reviewed the observations given in the study report and requested **WG 3** to consider these observations while reviewing IS 14625.

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

The Committee decided to schedule the next meeting on 5th march, 2025 at IIP, Bombay.

**Item 10 VOTE OF THANKS**

The meeting ended with vote of thanks to all members.

**ANNEX I**

Plastics Packaging Sectional Committee, PCD 21

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| **Sl.**  **No.** | **Organization** | **Represented by** | **Email id** | **Role** |
| 1 | Indian Institute of Packaging, Mumbai | Dr. Babu Rao Guduri | tneiip1@iip-in.com | Chairperson |
| 2 | All India Food Processors Association, New Delhi | Shri Akalesh Sharma | akalesh.sharma@dfmfoods.com | Principal Member |
| 3 | Bisleri International Private Limited, New Delhi | Shri K. Ganesh | k.ganesh@bisleri.co.in | Principal Member |
| 4 | Central Institute of Plastics Engineering and Technology, Chennai | Shri K. A. Rajesh | rajeshcipet@gmail.com | Alternate Member |
| 5 | Chemco Plastic Industries Private Limited, Mumbai | Ms. Rupande Sampat | rupande@chemcogroup.com | Alternate Member |
| 6 | Coca-Cola India Private Limited, Gurugram | Shri Virendra Landge | vlandge@coca-cola.com | Principal Member |
| Shri Rajendra Dobriyal | rdobriyal@coca-cola.com | Alternate Member |
| 7 | GAIL (India) Limited, New Delhi | Shri V. B. Singh | vbsingh@gail.co.in | Alternate Member |
| 8 | HPCL Mittal Energy Limited, Noida | Shri Alakesh Ghosh | alakesh.ghosh@hmel.in | Alternate Member |
| 9 | Haldia Petrochemicals Limited, Kolkata | Shri T. R. Srikanth | srikanth.ramani@hpl.co.in | Alternate Member |
| 10 | Indian Centre for Plastics in the Environment, Mumbai | Shri Tushar K. Bandopadhyay | tk.bandopadhyay@icpe.in | Principal Member |
| 11 | Indian Oil Corporation Limited, New Delhi | Shri Dhananjay Sahoo | sahoodhananjay@indianoil.in | Principal Member |
|  |  | Shri Ponnuswamy K. | kponnuswamy@indianoil.in | Alternate Member |
| 12 | Mother Dairy Fruit and Vegetable Limited, Delhi | Shri Avnindra Singh | avinindra23@gmail.com | Alternate Member |
| 13 | Nestle India Limited, Gurugram | Ms. Sarita Devi | sarita.devi@in.nestle.com | Principal Member |
| 14 | Pigeon India, Gurugram | Shri Gopal Sharma | gopal.sharma@in.pigeon.com | Principal Member |
| 15 | Presto Stantest Pvt. Ltd., Faridabad, Haryana | Shri Gaurav Malhotra | gaurav@prestogroup.com | Alternate Member |
| 16 | Shriram Institute for Industrial Research, Delhi | Shri Sanjay Kumar Singh | sanjaysingh@shriraminstitute.org | Principal Member |
| Dr. Mukti Tyagi | mukti@shriraminstitute.org | Alternate Member |
| 17 | Uflex Limited, Noida | Shri Rahul Dubey | rahul.dubey@uflexltd.com | Principal Member |
| 18 | Pigeon India, Gurugram  (*Guest*) | Shri Laiq Ahmad | laiq.ahmad@pigeon.com | Invitee |
| 19 | Project leader of R and D project -0094 | Dr. Rachana Kumar | rachana.kumar@iitr.res.in | Invitee |
| 20 | Chemco Plastic Industries Private Limited, Mumbai (*Guest*) | Shri Vikram Sharma | vikram@chemcogroup.com | Invitee |
| Shri Krishna Kumar Omar | krishnaomar@chemcogroup.com | Invitee |
| 21 | Syensqo (*Guest*) | Shri Shailendra Kumar Singh | shailendra.singh@syensqo.com | Invitee |