BUREAU OF INDIAN STANDARDS

MINUTES OF MEETING

GLASS, GLASSWARE AND LABORATORYWARE SECTIONAL COMMITTEE, CHD 10

Twenty Second Meeting

Day and Date	Tuesday, 20 December 2022
Time	03.00 PM
Mode of meeting	VC on WebEx

SESSION-CHAIRPERSON: Dr. K. Annapurna, Chief Scientist, CGCRI-Kolkata

MEMBER SECRETARY: Mohit Garg, Scientist–B, BIS-New Delhi

List of members attended the meeting is given at **Annex-I.**

Item 1 OPENING OF THE MEETING

1.1 Welcome by BIS

On behalf of BIS, Shri Mohit Garg welcomed the Chairperson and participants in the meeting. He informed to committee that Dr Suman K Mishra (Director CGCRI), the Chairperson of the committee has expressed inability to attend the meeting due to occupancy in other urgent official meeting. He requested committee to appoint a session chairperson for current meeting. The committee unanimously appointed Dr K Annapurna from CGCRI as the chairperson for the current meeting.

1.2 Opening remarks by the Chairperson

Dr. Annapurna warmly welcomed all the participants to the meeting. She requested members to actively participate in the meeting and contribute for fruitful outcome from deliberations. With the above remarks, the chairperson requested the Member Secretary to progress the meeting as per the agenda of the meeting.

Item 2 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

Since there were no comments on the minutes of the 21st meeting, the committee confirmed the minutes as circulated.

Item 3 SCOPE AND COMPOSITION OF CHD 10 AND SUBCOMMITTEES UNDER CHD 10

3.1 The Committee reviewed and confirmed the scope and composition of CHD 10 along with the composition of its six subcommittees and two panels. The committee also requested BIS

Secretariat to write letters to the organizations for active participation which have not attended the last three meetings.

3.2 The Committee noted the updated nominations from BOROSIL Ltd., Shri Jeevan Dogra as primary member.

3.3 The Committee noted the updated nominations from GSI, Ms Dilna Subramanian as alternative member.

Item 4 Draft Standard/Amendments for Finalization

4.1 Adoption of ISO 3585: 1998 Borosilicate Glass 3.3 – Properties

The Committee noted that the draft National Forward [Doc. No.: CHD 10/20336] for the adoption of ISO 3585 was sent for wide circulation on 06-09-2022 for 2 months and no comments were received during the period.

Therefore, on the recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.2 Adoption of ISO 1776: 1985 Glass — Resistance to attack by hydrochloric acid at 100 degrees C — Flame emission or flame atomic absorption spectrometric method

The Committee noted that the draft National Forward [Doc. No.: CHD 10/20335] for the adoption of ISO 1776 was sent for wide circulation on 07-09-2022 for 2 months and no comments were received during the period.

Therefore, on recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.3 Revision of IS/ISO 4803: 1978 Laboratory glassware – Borosilicate glass tubing

The Committee noted that in its previous meeting it was decided to revise the IS/ISO 4803 on the recommendation of CHD 10:5 laboratory ware subcommittee by adopting ISO 4803: 2021 which comprises of the following changes:

- update of the dimensions and tolerances;
- Inclusion of a comprehensive and precise description of the mentioned quality characteristics and determination methods.

The Committee further noted that the draft NF [Doc. No.: CHD 10/20339] for adoption of ISO 4803:2021 was sent into the wide circulation on 06-09-2022 for 2 months and no comments were received during the period.

Therefore, on recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.4 Revision of IS/ISO 4787: 2010 Laboratory Glassware – Volumetric instruments – Methods for testing of capacity and for use

The Committee noted that in its previous meeting it was decided to revise the IS/ISO 4787 on the recommendation of CHD 10:5 laboratory ware subcommittee by adopting ISO 4787: 2021 which comprises of the following changes:

— volumetric plastic ware has been included;
— new information on meniscus adjustment of convex meniscus has been added; namely, altered procedure "Upper edge of the graduation line is horizontally tangential to the highest point of meniscus" as compared to older procedure "Upper edge of the graduation line is horizontally tangential to the lowest point of the meniscus";
— improved figures for meniscus adjustment have been provided;
— Table 1 has been improved;
— new Table 2 for minimum requirements for the measurement devices has been added;
— new test room ambient conditions have been added;
— new information regarding repeatability and uncertainty has been added in Annex E;
— Formula (C.1) has been changed to Formula (1).

The Committee further noted that the draft NF [Doc. No.: CHD 10/20328] for adoption of ISO 4787:2021 was sent for WC on 06-09-2022 for 2 months and no comments were received during the period.

Therefore, on recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.5 Revision of IS/ISO 8655 (Part 7): 2005 Piston - Operated volumetric apparatus: Part 7 Non — Gravimetric methods for the assessment of equipment performance

The Committee noted that in its previous meeting it was decided to revise the IS/ISO 8655 (Part 7) on the recommendation of CHD 10:5 laboratory ware subcommittee by adopting ISO 8655 (Part 7): 2021 which comprises of the following changes:

- The title has been changed to "Piston - Operated volumetric apparatus: Part 7 Alternative measurement procedures for the determination of Volume"
- a gravimetric test method was added (see 8.2);
- a photometric/gravimetric hybrid test method was added (see 8.5);
- a batch testing method was added (see 8.7);
- measurement procedures for all methods are given in normative Annexes A to E;
- standard dispense procedures for POVA described in ISO 8655-2, ISO 8655−3, ISO 8655−4, ISO 8655−5, and ISO 8655−9 were added (see Clause 9);
- requirements for operator qualification have been added (see 4.3);
- requirements for testing of multi-channel POVA is described in more detail, with specific procedures given for these apparatus (see 8.5, and Annex D);
- Annexes A, B, and C of the first edition have been deleted and replaced.

The Committee further noted that the draft NF [Doc. No.: CHD 10/20337] for adoption of ISO 8655 (Part 7): 2021 was sent for WC on 06-09-2022 for 2 months and no comments were received during the period.

Therefore, on recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.6 Adoption of ISO 9008: 1991 Glass bottles - Verticality - Test method

The Committee noted that the draft NF [Doc. No.: CHD 10/20331] for adoption of ISO 9008 was sent for WC on 07-09-2022 for 2 months and no comments were received during the period.

Therefore, on recommendation of CHD 10:3 subcommittee, the committee decided to finalize the draft for printing.

4.7 Adoption of ISO 9009: 1991 Glass containers - Height and non-parallelism of finish with reference to container base – Test methods

The Committee noted that the draft NF [Doc. No.: CHD 10/20333] for adoption of ISO 9009 was sent for WC on 07-09-2022 for 2 months and no comments were received during the period.

Therefore, on recommendation of CHD 10:3 subcommittee, the committee decided to finalize the draft for printing.

4.8 Revision of IS 9153: 1978 Methods of polariscopic examination of glassware

The Committee noted that the revised draft [Doc. No.: CHD 10/20435] was sent for WC on 07-09-2022 for 2 months and no comments were received during the period.

Therefore, on recommendation of CHD 10:3 subcommittee, the committee decided to finalize the draft for printing.

4.9 Revision of IS 5437: 1994 Figured, rolled and wired glass - specification

The Committee noted that in its previous meeting, it was decided the revise the standard and accordingly the revised draft [Doc. No.: CHD 10/20484] prepared by the CHD 10:6 Subcommittee was sent for WC for 2 months. During the WC period, some comments were received from the stakeholders which have been discussed in the 10th meeting of the CHD 10:6 and following changes were made to the draft:

i. The subcommittee modified the English title to **ROLLED GLASS : PATTERNED, EXTRA CLEAR PATTERNED, WIRED AND WIRED-PATTRERNED GLASS — SPECIFICATION** ***(Second Revision)***

ii. The subcommittee modified the Hindi title to **बेल्लित काँच : उत्कीर्ण-चित्रित, अतिरिक्त स्पष्ट उत्कीर्ण-चित्रित, तार युक्त तथा तार युक्त उत्कीर्ण-चित्रित काँच — विशिष्टि** (*दूसरा पुनरीक्षण*)

The committee agreed to these changes on the recommendation of CHD 10:6 subcommittee and decided to finalize the draft for printing.

4.10 Revision of IS 2480 (Part 1): 1983 Specification for general purpose glass thermometers: Part 1 solid - Stem thermometers (Second Revision)

The Committee noted that the revised draft [Doc. No. CHD 10/18894] was sent for the wide circulation on 17-02-2022 for 2 months incorporating the following changes:

i. Requirement for Stability is added by referring IS 6274: 1971.
ii. A sampling plan for lot inspection has also been prescribed.

iii. Updated BIS Certification Marking Clause as per BIS Act 2016 and rules and regulations framed thereunder; and,
iv. Several editorial changes as per the latest standard format such as inclusion of Hindi title, ICS No., Reference clause, updated references, etc.

The Committee also noted that the CHD 10:5 Subcommittee has deliberated upon the comments received during the WC period and decided as follows:

i. Kerosene oil to be added as an alternative thermometric liquid in clause 6.1.2 for the range of -20 to $+150^0$ C.
ii. For top finish of thermometer, rubber ring may also be added in addition to the glass ring in clause 6.2.2.
iii. The immersion line shall be at a distance of at least 76 mm from the bulb instead of existing value of 60 mm.
iv. In table 1, three new ranges may also be added namely, (-100 to +100 ^{0}C), (-10 to +50 ^{0}C with smallest division being 0.5), and (-10 to +50 ^{0}C with smallest division being 0.25 and with a note specifying that for this category, the use of kerosene oil as a thermometric liquid should be avoided because of less accuracy).

On recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.11 Revision of IS 2480 (Part 2): 1982 Specification for general purpose glass thermometers: Part 2 enclosed - Scale thermometers (Second Revision)

The Committee notes that the revised draft [Doc. No. CHD 10/18893] was sent for the wide circulation on 17-02-2022 for 2 months incorporating the following changes:

i. Requirement for Stability is added by referring IS 6274: 1971.
ii. A test method for accuracy has also been added by referring to IS 6274: 1971.
iii. A sampling plan for lot inspection has also been prescribed.
iv. Updated BIS Certification Marking Clause as per BIS Act 2016 and rules and regulations framed thereunder; and,
v. Several editorial changes as per the latest standard format such as inclusion of Hindi title, ICS No., Reference clause, updated references, etc.

The Committee also noted that the CHD 10:5 Subcommittee has deliberated upon the comments received during the WC period and decided as follows:

i. Kerosene oil to be added as an alternative thermometric liquid in clause 6.1.2 for the range of -20 to $+150^0$ C.
ii. For top finish of thermometer, rubber ring may also be added in addition to the glass ring in clause 6.2.2.
iii. The immersion line shall be at a distance of at least 76 mm from the bulb instead of existing value of 60 mm.
iv. In table 1, three new ranges may also be added namely, (-100 to +100 ^{0}C), (-10 to +50 ^{0}C with smallest division being 0.5), and (-10 to +50 ^{0}C with smallest division being 0.25 and with a note specifying that for this category, the use of kerosene oil as a thermometric liquid should be avoided because of less accuracy).

On recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.12 Revision of IS 1672: 1967 Specification for floating dairy thermometers (First Revision)

The Committee noted that the revised draft [Doc. No. CHD 10/18896] was sent for the wide circulation on 17-02-2022 for a period of 2 months incorporating the following changes:

i. Requirement for Stability is added by referring IS 6274: 1971.
ii. A test method for accuracy has also been added by referring to IS 6274: 1971.
iii. A sampling plan for lot inspection has also been prescribed.
iv. Class of glass used is prescribed as HGB 3 or better as per IS 2303(Part 1/Sec 1): 2021.
v. Updated BIS Certification Marking Clause as per BIS Act 2016 and rules and regulations framed thereunder; and,
vi. Several editorial changes as per the latest standard format such as inclusion of Hindi title, ICS No., Reference clause, updated references, etc.

The Committee also noted that the CHD 10:5 Subcommittee has deliberated upon the comments received during the WC period and decided as follows:

i. Kerosene oil and other thermometric liquids to be added as an alternative thermometric liquid in clause 5.2.2 for the range of -20 to $+150^0$ C.

On recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.13 Revision of IS 12580 (Part 1): 1989 Glass thermometers for precision use - Specification: Part 1 Solid - Stem thermometers (First Revision)

The Committee noted that the revised draft [Doc. No. CHD 10/18897] was sent for the wide circulation on 17-02-2022 for a period of 2 months incorporating the following changes:

i. Requirement for Stability is added by referring IS 6274: 1971.
ii. A sampling plan for lot inspection has also been prescribed.
iii. Updated BIS Certification Marking Clause as per BIS Act 2016 and rules and regulations framed thereunder; and,
iv. Several editorial changes as per the latest standard format such as inclusion of Hindi title, ICS No., Reference clause, updated references, etc.

The Committee also noted that the CHD 10:5 Subcommittee has deliberated upon the comments received during the WC period and decided as follows:

i. Kerosene oil and other thermometric liquids to be added as an alternative thermometric liquid in clause 8.1.2 for the range of -20 to $+150^0$ C.
ii. For top finish of thermometer, rubber ring may also be added in addition to the glass ring in clause 8.2.2.

On recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

4.14 Revision of IS 12580 (Part 2): 1989 Glass thermometers for precision use - Specification: Part 2 enclosed - scale thermometers (First Revision)

The Committee noted that the revised draft [Doc. No. CHD 10/18898] was sent for the wide circulation on 17-02-2022 for a period of 2 months incorporating the following changes:

i. Requirement for Stability is added by referring IS 6274: 1971.
ii. A sampling plan for lot inspection has also been prescribed.
iii. Updated BIS Certification Marking Clause as per BIS Act 2016 and rules and regulations framed thereunder; and,
iv. Several editorial changes as per the latest standard format such as inclusion of Hindi title, ICS No., Reference clause, updated references, etc.

The Committee also noted that the CHD 10:5 Subcommittee has deliberated upon the comments received during the WC period and decided as follows:

i. Kerosene oil and other thermometric liquids to be added as an alternative thermometric liquid in clause 8.1.2 for the range of -20 to $+150^0$ C.
ii. For top finish of thermometer, rubber ring may also be added in addition to the glass ring in clause 8.2.2.

On recommendation of CHD 10:5 subcommittee, the committee decided to finalize the draft for printing.

Item 5 Draft Standards/ Amendments for Approval for Wide Circulation

5.1 New standard on Tinted or Coloured Float Glass – Specification

The Committee noted that the CHD 10:6 Flat & Coated Glass Subcommittee has prepared the draft [Doc. No. CHD 10/19275] which was sent for preliminary circulation on 04/04/2022 among the members of CHD 10 and CHD 10:6 Subcommittee for 21 days inviting their comments/suggestions and no comments were received during the P-Draft Stage. However, the subcommittee in its 10^{th} meeting reviewed the draft and after deliberation decided to modify the following clauses:

i. The subcommittee noted that the categorization of the tinted glass based on evaluation of a single thickness could be misleading for the consumers and hence the subcommittee decided to remove the evaluation based on single thicknesses for categorization of tinted glass into light, medium or dark tint.

ii. The subcommittee agreed to the proposal of the convener to designate the categories as 'L' for Light tint, 'M' for medium tint, and 'D' for Dark tint and accordingly modified the marking requirements on the packets.

iii. The subcommittee modified the definition of "Tinted Glass" as '*A tinted or coloured glass is a normal body coloured flat or float glass to which colourants (normally metal oxides) are added during manufacturing process to achieve tinting and solar radiation absorption properties. It excludes all other glasses which do not have uniform colour within the body like in case of painted or coated glasses.*

iv. The subcommittee changed the English Title of the standard as "**TINTED OR BODY COLOURED FLAT AND FLOAT GLASS – SPECIFICATION"**

v. The subcommittee changed the Hindi Title of the standard as "**रंगीन *समतल तथा* प्लव काँच — विशिष्टि**"

On recommendation of CHD 10:6 subcommittee, the committee decided to circulate the draft into wide circulation for a period of 2 months incorporating the above mentioned changes.

5.2 Coated Glass - Specification

The Committee noted that the draft [Doc. No.: CHD 10/19298] prepared by the CHD 10:6 Subcommittee was circulated among the committee members for 21 days and comments were received from Gujarat Guardian Ltd. The subcommittee deliberated the comments and decided as follows:

i. The subcommittee agreed to add BS 1096-3: 2012 & ISO 11479-2: 2011 in the list of standards from where assistance has been derived in the Foreword.

ii. The subcommittee rejected the comment to have separate standards on Vacuum sputter coating & Pyrolytic coating as the draft standard prescribes the final characteristics/requirements of the product independent of the coating process used.

iii. The subcommittee rejected the comment to delete the UV related requirements because it is an important parameter for the performance of the tinted glass to be used in buildings.

iv. The subcommittee decided to retain the requirement for delta E as given in the draft standard ($\Delta E \leq 4.5$). The subcommittee noted that this requirement has been taken from the ASTM C 1376-10.

v. The subcommittee agreed to the proposal of Shri Sharanjit Singh to have a table listing the sample size and no. of samples required for each tests in the standard. Shri Nagendra Kumar volunteered to prepare this table with the help of other manufacturers and agreed to submit the table to the BIS Secretariat by 30 Nov 2022.

vi. The subcommittee rejected the comment to delete the requirements for toughened glass clarifying that the document is providing only an alternative procedure to evaluate the requirements for the toughened coated glasses.

vii. The subcommittee decided to retain the ambient temperature conditions for testing as 27 ± 2 deg. C.

viii. The subcommittee decided to add a note after the radiation exposure test that this test is not required on a daily basis, its frequency may be kept lower (like once in a month).

ix. The subcommittee decided to retain the mandatory marking of month and year of the manufacturing as it is a mandatory requirement as per BIS Rules, 2018 and also some coatings have shelf life so it is important.

x. The subcommittee rejected the comment to convert the month into days for marking as it is not convenient to both the manufacturer and the consumers and may create confusion.

xi. The subcommittee decided to retain the existing test method for condensation resistance test in the draft as per EN 1096-2. Further, the subcommittee remarked if Gujarat Guardian may came up with some reference document and some test data then an alternative test method may also be added. GGL may comment again during the Wide Circulation period with appropriate references.

xii. The subcommittee decided to make the Neutral Salt Spray test as an optional requirement keeping in view the fact this requirement is more required in case of heavy snowing areas.

xiii. The subcommittee rejected the comment to replace the test method for abrasion resistance test with test method provided in the ASTM D 1044 as this test method is applicable for the surface abrasion of plastic materials.

On recommendation of CHD 10:6 subcommittee, the committee decided to circulate the draft into wide circulation for a period of 2 months incorporating the above mentioned changes.

5.3 Revision of IS 8787: 2018 Principles of design, construction and use of liquid in glass thermometers (First revision)

The Committee noted that it is an identical adoption of ISO 386 which was published by ISO/TC 48 which has now been withdrawn.

Keeping in view that the liquid in glass thermometers are still in use in the country, the CHD 10:5 subcommittee proposed to prepare our own Indian Standard on the basis of the existing standard. On recommendation of CHD 10:5 subcommittee, the committee decided to circulate the revised draft into wide circulation for a period of 2 months.

5.4 Revision of IS 10072: 1982 Specification for plastics beakers

The Committee noted that the CHD 10:5 subcommittee has reviewed the ISO 7056: 1981 which is on the same subject and has proposed to revise the Indian standard by adopting ISO 7056: 1981.

The committee agreed to the proposal of the CHD 10:5 Subcommittee and decided to circulate the draft NF into wide circulation for a period of 2 months.

5.5 Revision of IS 10073: 1982 Specification for plastics graduated measuring cylinders

The Committee noted that the CHD 10:5 subcommittee has reviewed the ISO 6706: 1981 which is on the same subject and has proposed to revise the Indian standard by adopting ISO 6706: 1981.

The committee agreed to the proposal of the CHD 10:5 Subcommittee and decided to circulate the draft NF into wide circulation for a period of 2 months.

5.6 Revision of IS 10231: 1982 Specification for plastics filter funnels

The Committee noted that the CHD 10:5 subcommittee has reviewed the ISO 7057: 1981 which is on the same subject and has proposed to revise the Indian standard by adopting ISO 7057: 1981.

The committee agreed to the proposal of the CHD 10:5 Subcommittee and decided to circulate the draft NF into wide circulation for a period of 2 months.

5.7 Revision of IS 2627: 1979 Glossary of terms relating to liquid - In - Glass thermometers (First Revision)

5.8 Revision of IS 4825: 1982 Specification for liquid - In – Glass solid - Stem reference thermometers (first revision)

5.9 Revision of IS 5681: 1992 General meteorological thermometers liquid - In - Glass - Specification (Second Revision)

5.10 Revision of IS 6017: 1971 Specification for thermometer for whirling psychrometers

5.11 Revision of IS 6274: 1971 Method of calibrating liquid - In - Glass thermometers

5.12 Revision of IS 6500: 1972 Specification for thermometer for measurement of sea surface temperature

5.13 Revision of IS 6592: 1972 Specification for soil thermometers

5.14 Revision of IS 7000: 1973 Specification for general purpose maximum and minimum thermometers

5.15 Revision of IS 8728: 1977 Specification for adjustable range thermometers

5.16 Revision of IS 12244 (Part 1): 1988 Specification for calorimeter thermometers Part 1 solid – Stem thermometers

5.17 Revision of IS 12244 (Part 2): 1988 Specification for calorimeter thermometers Part 2 enclosed scale thermometers

The Committee noted that the CHD 10:5 subcommittee has proposed to revise the above mentioned 11 thermometer standards based on the changes made in the other thermometer standards such as the addition of other thermometric liquids, provision for a rubber ring for the top finish, and other editorial and statutory changes, etc.

The committee agreed to the proposal of CHD 10:5 subcommittee and decided to circulate the revised draft into wide circulation for a period of 2 months.

5.18 Revision of IS 3104 (Part 1): 1982 Specification for density hydrometers Part 1 requirements (First Revision)

The Committee noted the following comments received from a BIS officer as a part of his Action Research Project:

- ISO 649-1:1981 may be adopted as suggested by one of the manufacturer (JK Scientific labs, Ambala).
- There are no technical changes between our Indian and ISO standard.

Based on the above comments, the CHD 10:5 subcommittee proposed to revise the standard by adopting ISO 649-1: 1981. The committee agreed to the proposal of the subcommittee and decided to circulate the revised draft into wide circulation for a period of 2 months.

5.19 Revision of IS 3104 (Part 2): 1982 Specification for density hydrometers Part 2 methods of test and use (First Revision)

The Committee noted the following comments received from BIS officer as a part of his Action Research Project:

- ISO 649-2:1981 may be adopted as suggested by one of the manufacturer (JK Scientific labs, Ambala).
- There are no technical changes between our Indian and ISO standard.

Based on the above comments, the CHD 10:5 subcommittee proposed to revise the standard by adopting ISO 649-2: 1981. The committee agreed to the proposal of the subcommittee and decided to circulate the revised draft into wide circulation for a period of 2 months.

5.20 Revision of IS 3608 (Part 1): 1987 Specification for glass alcoholometers Part 1 glass alcoholometers without thermometer (First Revision)

The Committee noted that the CHD 10:5 subcommittee has reviewed the ISO 4801: 1979 which is on the same subject and has proposed to revise the standard by adopting the ISO 4801: 1979.

The committee agreed to the proposal of the subcommittee and decided to circulate the draft NF into wide circulation for a period of 2 months.

5.21 Revision of IS 3608 (Part 2): 1987 Specification for glass alcoholometers Part 2 glass alcoholometers with thermometer Thermo - Alcoholometers (First Revision)

The Committee noted the CHD 10:5 subcommittee has reviewed the ISO 4805: 1982 which is on the same subject and has proposed to revise the standard by adopting ISO 4805: 1982.

The committee agreed to the proposal of the subcommittee and decided to circulate the draft NF into wide circulation for a period of 2 months.

5.22 Revision of IS 9621: 1980 Principles of construction and adjustment of glass hydrometers

The Committee noted that the CHD 10:5 subcommittee has reviewed the ISO 387 which is on the same subject and has proposed to revise the standard by adopting ISO 387.

The committee agreed to the proposal of the subcommittee and decided to circulate the draft NF into wide circulation for a period of 2 months.

5.23 Revision of IS 6654: 1992 Glass containers - Glossary of terms (Second Revision)

The Committee noted that the CHD 10:3 Subcommittee has reviewed the revised draft prepared by the BIS Secretariat by incorporating new terms from the ASTM C162.

Therefore, on recommendation of CHD 10:3 subcommittee, the committee decided to circulate the draft into wide circulation for a period of 2 months.

5.24 Revision of IS 10133: 1982 Specification for glass bottles - Dimensional relationships and tolerances

The Committee noted that the CHD 10:3 Subcommittee has reviewed the revised draft prepared by the BIS Secretariat by incorporating new the test method for brimful capacity by referring to IS 10497: 2018 and several other editorial changes as per the latest standard format.

Therefore, on recommendation of CHD 10:3 subcommittee, the committee decided to circulate the draft into wide circulation for a period of 2 months.

5.25 Revision of IS 6945: 1973 Code of practice for packaging glass and glassware

The Committee noted that the CHD 10:3 Subcommittee has reviewed the revised draft prepared by the BIS Secretariat by updating the references and incorporating several editorial changes as per the latest standard format.

Therefore, on recommendation of CHD 10:3 subcommittee, the committee decided to circulate the draft into wide circulation for a period of 2 months.

5.26 Revision of IS 8697: 1977 Code of practice for export packaging of glass container ware

The Committee noted the CHD 10:3 Subcommittee has reviewed the revised draft prepared by the BIS Secretariat by updating the references and incorporating several editorial changes as per the latest standard format.

Therefore, on recommendation of CHD 10:3 subcommittee, the committee decided to circulate the draft into wide circulation for a period of 2 months.

5.27 Revision of IS 2620: 1963 Specification for distilling flasks

The Committee noted that this standard was allocated to Ms. Supriya Sachdeva, Scientist-D currently posted at Chandigarh Branch office of BIS. After reviewing the other standards available on the subject and consultation with the manufacturers she has proposed to revise the standard incorporating the listed below changes:

i. The references have been updated,
ii. Hydrolytic resistance specified as Class HGB 1 when tested and graded as per IS 2303 (Part 1/Sec 1),
iii. In the materials requirement, borosilicate glass is prescribed,
iv. The thermal shock test has been modified with the delta T as 120 ^{0}C,
v. Updated BIS Certification Marking Clause as per BIS Act 2016,
vi. Several other editorial changes have been incorporated such as inclusion of Hindi title, ICS No., Reference clause, etc.

The committee agreed to her proposal and decided to circulate the revised draft incorporating the above changes into wide circulation for a period of 2 months.

5.28 Revision of IS 1392:1999 Glass Milk Bottles – Specification

The Committee noted that this standard was allocated to Shri Sachin S Menon, Scientist-C at BIS. After reviewing the other standards available on the subject and consultation with the manufacturers he has proposed to revise the standard incorporating the listed below changes:

i. References may be updated to address latest versions of the referred standards.
ii. Terminology may be modified to include terms and definitions in IS 1382.
iii. Requirements for Material and Workmanship may be modified in line with corresponding requirement in IS 5168.
iv. Requirement for Limit for alkalinity may be modified as class HGB 3 or higher.
v. Method of test for stability may be updated to address inclined surfaces.
vi. Requirement for capacity may be updated to address standard terminology i.e., brimful capacity.
vii. Requirement for leakage may be added.
viii. Bottle washing may be removed from requirements and be placed as a separate clause.

The committee agreed to his proposal and decided to circulate the revised draft incorporating the above changes into wide circulation for a period of 2 months.

ITEM 6 NEW PROPOSAL RECEIVED

6.1 The Committee reviewed the new proposal received from Indian Cellular & Electronic Association to formulate an Indian standard on Tempered glass screen protectors.

The CHD 10:4 convener informed the committee that these type of glasses are chemically tempered and may be used in other applications also. He further suggested to formulate a standard on chemically tempered glass which may be referred for all type of applications including the screen protectors. The Committee agreed to his suggestion and requested CHD 10:4 subcommittee to prepare a working draft for chemically tempered glass specifications.

ITEM 7 STANDARDS FOR WITHDRAWAL

7.1 IS 1922: 1961 Specification for liquid gold, bright

The BIS Secretariat informed the committee that on several occasions this standard has been discussed with several glass and glassware manufacturers and it has been found that this product is neither manufactured in the country and nor it is being used anywhere and hence it was proposed to withdraw this Indian standard. The committee agreed to the proposal of the BIS secretariat and recommended the standard for withdrawal.

7.2 IS 7374: 1974 Specification for glass rods and tubing for laboratory glassware

Shri Shrikant Gangan informed the committee that most of the laboratory glassware are made of borosilicate glass only for which we already have IS/ISO 4803. The chairperson remarked that unless we are certain that quartz or soda silicate glass is now not used for any type of laboratory glassware, the standard should not be withdrawn. The committee requested BIS Secretariat to further investigate the matter by consulting with other laboratory glassware manufacturers. The committee decided to review this standard again in its next meeting.

Item 8 DATE FOR NEXT MEETING

The committee decided to hold the next meeting around the end week of February 2023.

Item 9 VOTE OF THANKS

There being no any other business, the meeting ended with a hearty vote of thanks to the chair and all the participants.

ANNEX – I

PARTICIPANTS IN THE 22nd MEETING OF CHD 10

Session-Chairperson: Dr. K. Annapurna, Chief Scientist, CSIR – CGCRI, Kolkata

BIS officials: Shri Mohit Garg, Member Secretary – CHD 10.

Sl. No.	Organization	Representative
1.	Asahi India Glass Limited	Shri Nagendra Kumar / Shri Rupinder Shelly
2.	Confederation Construction Products and Services (CCPS)	Smt. Sarita Balodhi
3.	CONSUMER VOICE	Shri B K Mukhopadhyay
4.	CSIR-CGCRI, Kolkata	Dr. K Annapurna
5.	Federation of Safety Glass	Shri Sharanjit Singh / Shri Tariq Kachwala
6.	Glazing Society of India	Shri G N Gohul Deepak/ Ms Dilna Subramanian
7.	Gold Plus Glass Industry Ltd.	Shri Prem Dutt
8.	Office of the Development Commissioner (MSME)	Shri Ambrose Royson
9.	Saint – Gobain Glass India Ltd.	Shri Chiranjit Roy
10.	SISECAM Flat Glass India Pvt. Ltd., Halol	Shri Parag shah
11.	In Personal Capacity	Dr. Devendra Kumar
12.	In Personal Capacity	Shri Shrikant Gangan