

BUREAU OF INDIAN STANDARDS

Program of Work

CHD 9 : Ceramicware

Scope: To formulate Indian Standards for terminology, methods of sampling and test; and specification for: i) Ceramic Raw Materials; ii) Whiteware, all types of ceramic table ware (excluding porcelain insulators, sanitary ware, tiles, salt glazed pipes & fittings; and ceramic laboratory ware); iii) Technical Ceramics; and iv) Ceramic Coated Metal ware (excluding wares used in hospitals)

Liaison: **ISO TC-166 (P):** *Ceramic ware, glassware and glass ceramic ware in contact with food* **ISO TC-206 (O):** *Fine ceramics*

Published Standards

| S.No | IS No. | TITLE | Reaffirm M-Y | No. of Amds | Eqv. |
|------|--|---|----------------|-------------|--------------------------------|
| 1 | IS 10429 : 2011 <i>Reviewed In : 2024</i> | Powdered talc for ceramic industry - Specification (First Revision) | January, 2024 | 1 | Indigenous |
| 2 | IS 11464 : 2021 | Quartz for Ceramic Industry - Specification (Second Revision) | | - | Indigenous |
| 3 | IS 11475 : 2002 <i>Reviewed In : 2018</i> | Stoneware crockeryware - Specification (Second Revision) | January, 2018 | - | Indigenous |
| 4 | IS 11477 : 2011 <i>Reviewed In : 2021</i> | Pyrophyllite for ceramic industry - Specification (First Revision) | March, 2021 | - | Indigenous |
| 5 | IS 12038 : 2024 ISO 4531:2022 <i>ISO 4531:2022</i> | Vitreous and Porcelain Enamels - Release From Enamelled Articles in Contact with Food - Methods of Test and Limits (Second Revision) | | - | Identical under dual numbering |
| 6 | IS 12038 : 2007 ISO 4531-1 <i>Reviewed In : 2017</i> <i>ISO 4531:2022</i> | Vitreous and porcelain enamels - Release of lead and cadmium from enamelled ware in contact with food: Part 1 method of test (First Revision) | March, 2017 | - | Identical under dual numbering |
| 7 | IS 12038 (Part 2) : 2007 ISO 4531-2 <i>Reviewed In : 2017</i> <i>ISO 4531-2</i> | Vitreous and porcelain enamels - Release of lead and cadmium from enamelled ware in contact with food: Part 2 permissible limits (First Revision) | March, 2017 | - | Identical under dual numbering |
| 8 | IS 12621 : 1988 <i>Reviewed In : 2022</i> | Bentonite for ceramic industry - Specification | December, 2022 | 2 | Indigenous |
| 9 | IS 13273 : 1991 <i>Reviewed In : 2024</i> | Vitreous enamelled inner tanks for storage water heater - specification | March, 2024 | 1 | Indigenous |
| 10 | IS 13273 : 2024 | Vitreous Enamelled Inner Tanks for Storage Water Heater - Specification (First Revision) | | - | Indigenous |
| 11 | IS 14179 : 1999 <i>Reviewed In : 2019</i> | Methods of test for ceramic tableware | November, 2019 | - | Indigenous |
| 12 | IS 14705 : 1999 <i>Reviewed In : 2019</i> | Vitreous china crockeryware - Specification | November, 2019 | - | Indigenous |

| | | | | | |
|----|---|---|----------------|---|--------------------------------|
| 13 | IS 14721 : 1999 Reviewed In : 2019 | Zinc oxide for ceramic industry - Specification | November, 2019 | - | Indigenous |
| 14 | IS 15751 : 2024 | Calcite for Ceramic Industry - Specification (First Revision) | | - | Indigenous |
| 15 | IS 15752 : 2007 Reviewed In : 2017 | Sericite for ceramic industry - Specification | March, 2017 | 1 | Indigenous |
| 16 | IS 17502 : 2020 | Methylene Blue Index of Clay - Method of Test | | - | Indigenous |
| 17 | IS 17933 : 2022 ISO 14704 : 2016 ISO 14704 : 2016 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for flexural strength of monolithic ceramics at room temperature | | - | Identical under dual numbering |
| 18 | IS 17934 : 2022 ISO 20501 : 2019 ISO 20501 : 2019 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Weibull statistics for strength data | | - | Identical under dual numbering |
| 19 | IS 17935 : 2022 ISO 18754 : 2020 ISO 18754 : 2020 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Determination of density and apparent porosity | | - | Identical under dual numbering |
| 20 | IS 17936 : 2022 ISO 20507 : 2014 ISO 20507 : 2014 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Vocabulary | | - | Identical under dual numbering |
| 21 | IS 17975 : 2022 ISO 14627 : 2012 ISO 14627 : 2012 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for fracture resistance of silicon nitride materials for rolling bearing balls at room temperature by indentation fracture (IF) method | | - | Identical under dual numbering |
| 22 | IS 17981 : 2022 ISO 17561 : 2016 ISO 17561 : 2016 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for elastic moduli of monolithic ceramics at room temperature by sonic resonance | | - | Identical under dual numbering |
| 23 | IS 17985 : 2022 ISO 26602:2017 ISO 26602:2017 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Silicon nitride materials for rolling bearing balls and rollers | | - | Identical under dual numbering |
| 24 | IS 17991 : 2022 ISO 14705 : 2016 ISO 14705 : 2016 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for hardness of monolithic ceramics at room temperature | | - | Identical under dual numbering |
| 25 | IS 18221 : 2023 ISO 17562 : 2016 ISO 17562 : 2016 | Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for linear thermal expansion of monolithic ceramics by push-rod technique | | - | Identical under dual numbering |
| 26 | IS 2333 : 1992 Reviewed In : 2024 | Plaster of paris for ceramic industry - Specification (Second Revision) | March, 2024 | 1 | Indigenous |
| 27 | IS 2717 : 1979 Reviewed In : 2024 | Glossary of terms relating to vitreous enamelware and ceramic - Metal systems (First Revision) | March, 2024 | 1 | Indigenous |
| 28 | IS 2781 : 2020 | Glossary of Terms Relating to Ceramicware (Third Revision) | - | - | Indigenous |

| | | | | | |
|----|--|--|----------------|---|--------------------------------|
| 29 | IS 2838 : 1964 Reviewed In : 2024 | Specification for stoneware containers for general purposes | March, 2024 | 3 | Indigenous |
| 30 | IS 2839 : 1964 Reviewed In : 2024 | Specification for industrial stoneware | March, 2024 | 4 | Indigenous |
| 31 | IS 2840 : 2021 | China Clay for Ceramic Industry - Specification | | - | Indigenous |
| 32 | IS 2857 : 2002 Reviewed In : 2018 | Earthenware crockeryware - Specification (Third Revision) | January, 2018 | - | Indigenous |
| 33 | IS 3149 : 1994 Reviewed In : 2019 | Enamelware for home use - Specification (Second Revision) | November, 2019 | 1 | Indigenous |
| 34 | IS 3505 : 2002 Reviewed In : 2018 | Porcelain crockeryware - Specification (Third Revision) | January, 2018 | - | Indigenous |
| 35 | IS 3972 (Part 1) : 2020 ISO 28764 ISO 28764 | Methods of Test for Vitreous Enamelware Part 1: Production of Specimens for Testing | | - | Identical under dual numbering |
| 36 | IS 3972 (Part 2/Sec 2) : 2023 ISO 2746:2015, ISO 8289-1:2020, ISO 8289-2:2019 | Vitreous Enamelware - Method of Test Part 2: Test Methods Section 2: Low and High Voltage Tests for Detecting and Locating Defects (Second Revision) | | - | Not Equivalent |
| 37 | IS 3972 (Part 2/Sec 3) : 2020 ISO 28706-2 : 2017 ISO 28706-2:2017 | Methods of Test for Vitreous Enamelware Part 2 Test Methods Section 3 Resistance to boiling acids, boiling liquids, alkaline liquids and their vapours (Second Revision) | - | - | Identical under dual numbering |
| 38 | IS 3972 (Part 2/Sec 4) : 2020 ISO 2747 : 1998 ISO 2747 | Methods of Test for Vitreous Enamelware Part 2 Test Methods Section 4 Resistance to thermal shock (Second Revision) | - | - | Identical under dual numbering |
| 39 | IS 3972 (Part 2/Sec 5) : 2020 ISO 28706-4 : 2016 ISO 28706-4 | Methods of Test for Vitreous Enamelware Part 2 Test Methods Section 5 Resistance to hot alkali (Second Revision) | - | - | Identical under dual numbering |
| 40 | IS 3972 (Part 2/Sec 6) : 1988 Reviewed In : 2019 | Methods of test for vitreous enamelware: Part 2 test methods: Sec 6 reflectance and specular gloss (First Revision) | November, 2019 | - | Indigenous |
| 41 | IS 3972 (Part 2/Sec 8) : 1990 Reviewed In : 2022 ISO 4530 : 2022 | Methods of test for vitreous enamelware: Part 2 test methods : Sec 8 resistance to heat (First Revision) | March, 2022 | - | Identical under dual numbering |
| 42 | IS 3972 (Part 2/Sec 8) : 2024 ISO 4530 : 2022 ISO 4530 : 2022 | Vitreous Enamelware Part 2 Test Methods Section 8 Resistance to Heat (Second Revision) | | - | Identical under dual numbering |
| 43 | IS 3972 (Part 2/Sec 9) : 1991 Reviewed In : 2019 ISO 8290 | Methods of test for vitreous enamelware: Part 2 test methods: Sec 9 resistance to dilute sulphuric acid (First Revision) | November, 2019 | 1 | Not Equivalent |
| 44 | IS 3972 (Part 2/Sec 11) : 2024 ISO/DIS 6370-1,2 | Vitreous Enamelware Part 2 Test Methods Section 11 Resistance to Abrasion (Second Revision) | | - | Not Equivalent |
| 45 | IS 3972 (Part 2/Sec 11) : 1995 Reviewed In : 2024 ISO/DIS 6370-1,2 | Methods of test for vitreous enamelware: Part 2 test methods: Sec 11 resistance to abrasion (First Revision) | January, 2024 | - | Not Equivalent |
| 46 | IS 3972 (Part 2/Sec | Methods of test for vitreous | November, 2019 | - | Indigenous |

| | | | | | |
|----|--|--|----------------|---|-----------------------------------|
| | 12) : 1999 Reviewed In : 2019 | enamelware: Part 2 test methods: Sec 12 resistance to torsion (First Revision) | | | |
| 47 | IS 3972 (Part 2/Sec 12) : 2024 | Vitreous Enamelware Part 2 Test Methods Section 12 Resistance to Torsion (Second Revision) | | - | Indigenous |
| 48 | IS 3972 (Part 2/Sec 13) : 2007 Reviewed In : 2021 | Methods of test for vitreous enamelware: Part 2 test methods: Sec 13 resistance to warpage (First Revision) | March, 2021 | - | Indigenous |
| 49 | IS 3972 (Part 2/Sec 14) : 2007 Reviewed In : 2021 | Methods of test for vitreous enamelware: Part 2 test methods: Sec 14 resistance to adherence (First Revision) | March, 2021 | - | Indigenous |
| 50 | IS 4589 : 2022 | Plastic Clay and Washed Plastic Clay for Ceramic Industry - Specification (Fourth Revision) | | - | Indigenous |
| 51 | IS 6988 : 2002 Reviewed In : 2018 | Fine (Bone) china crockeryware - Specification (Second Revision) | January, 2018 | - | Indigenous |
| 52 | IS 7087 : 1979 Reviewed In : 2023 | Specification for ceramic tower packings (First Revision) | March, 2023 | 2 | Indigenous |
| 53 | IS 7775 : 1975 Reviewed In : 2019 | Specification for ceramic grinding media and lining | November, 2019 | 1 | Indigenous |
| 54 | IS 8017 : 1988 Reviewed In : 2019 | Specification for vitreous enamelled reflectors for use with illuminating device | November, 2019 | 1 | Indigenous |
| 55 | IS 8687 (Part 1) : 2023 | Vitreous Enamels and Frits - Method of Test Part 1 Sieve Analysis (First Revision) | | - | Indigenous |
| 56 | IS 8687 (Part 2) : 2020 ISO 4534 : 2010 ISO 4534 | Methods of Test for Vitreous Enamels and Frits Part 2 Fusion Flow Test (First Revision) | - | - | Identical under dual numbering |
| 57 | IS 8709 : 2023 | Colour Retention of Vitreous Enamel Coatings - Method of Test (First revision) | | - | Indigenous |
| 58 | IS 9749 : 2020 | Potash Feldspar and Soda Feldspar for Glass and Ceramic Industry — Specification (Second Revision) | - | - | Indigenous |
| 59 | IS 9806 : 2001 Reviewed In : 2017 ISO 6486 -1,2. ISO 7086 - 1,2 | Methods of test for and permissible limits of toxic materials released from ceramicware, vitreous enamelware, glassware and glass - Ceramicware in contact with food (First Revision) | March, 2017 | 1 | Not Equivalent |

Standards under Development

Projects Approved

| SI. No. | Doc No. | Title |
|-------------------------|---------|-------|
| <i>No Records Found</i> | | |

Preliminary Draft Standards

| SI. No. | Doc No. | Title |
|-------------------------|---------|-------|
| <i>No Records Found</i> | | |

Drafts Standards in WC Stage

| SI. No. | Doc No. | Title |
|---------|---------------|-----------------------------|
| 1 | CHD 9 (24931) | Clay Utensils Specification |

Draft Standards Completed WC Stage

| SI. No. | Doc No. | Title |
|---------|---------------|--|
| 1 | CHD 9 (23381) | Earthenware Crockeryware - Specification Fourth Revision |
| 2 | CHD 9 (23550) | Stoneware Crockeryware - Specification Third Revision |
| 3 | CHD 9 (23551) | Fine Bone China Crockeryware - Specification |
| 4 | CHD 9 (23552) | Porcelain Crockeryware - Specification |
| 5 | CHD 9 (24073) | Plaster of Paris for Ceramic and Glass Industry - Specification Third Revision |
| 6 | CHD 9 (24977) | Stoneware Containers for General Purposes - Specification First Revision |
| 7 | CHD 9 (24979) | Industrial Stoneware - Specification First Revision |
| 8 | CHD 9 (24986) | Vitreous Enamelware and Ceramic-Metal Systems - Glossary Second Revision |

Finalized Draft Indian Standard

| SI. No. | Doc No. | Title |
|-------------------------|---------|-------|
| <i>No Records Found</i> | | |

Finalized Draft Indian Standards under Print

| SI. No. | Doc No. | Title |
|-------------------------|---------|-------|
| <i>No Records Found</i> | | |

Total Published Standards:54 Total Standards Under development:9

Aspect Wise Report

Product : 23
Code of Practices : 0
Methods of Test : 25
Terminology : 3
Dimensions : 1
System Standard : 0
Safety Standard : 1
Others : 1
Service Specification : 0
Process Specification : 0
Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

| SI. No. | IS No. & Year | Title |
|---------|--|---|
| 1 | IS 10432 (Part 1/Sec 2) : 1982 | Methods of test for vitreous enamelware Part 1 Preparation of specimen for testing Sec 2 Enamelled cast iron |
| 2 | IS 12038 : 1987 Reviewed In : 2012 | Permissible Limits and Test Methods for Toxic Materials Released from Enamelware in Contact with Food |
| 3 | IS 3972 : 1968 | Methods Of Test For Vitreous Enamelware |
| 4 | IS 3972 (Part 1/Sec 2) : 1982 Reviewed In : 2020 ISO 2724 | Methods of test for vitreous enamelware Part 1 preparation of specimen for testing Sec 2 enamelled cast iron First Revision |
| 5 | IS 3972 (Part 2/Sec 1) : | Methods of Test for Vitreous Enamelware Part 2 Test Methods Section 1 Resistance to corrosion |

| | | |
|---|--|--|
| | 2020 ISO 28706-1 : 2008 ISO 28706-1 | by dilute acids at room temperature Second Revision |
| 6 | IS 3972 (Part 2/Sec 7) : 1990 Reviewed In : 2017 ISO 2743 | Methods of test for vitreous enamelware Sec 7 resistance to boiling hydrochloric acid Part 2 test methods First Revision |

Annexure-II :List of Indian Product Standards

| Sl. No. | IS No. & Year | Title |
|---------|--|---|
| 1 | IS 10429 : 2011 Reviewed In : 2024 | Powdered talc for ceramic industry - Specification First Revision |
| 2 | IS 11464 : 2021 ISO 14533-3:2017 | Quartz for Ceramic Industry - Specification Second Revision |
| 3 | IS 11475 : 2002 Reviewed In : 2018 | Stoneware crockeryware - Specification Second Revision |
| 4 | IS 11477 : 2011 Reviewed In : 2021 | Pyrophyllite for ceramic industry - Specification First Revision |
| 5 | IS 12621 : 1988 Reviewed In : 2022 | Bentonite for ceramic industry - Specification |
| 6 | IS 13273 : 2024 | Vitreous Enamelled Inner Tanks for Storage Water Heater - Specification First Revision |
| 7 | IS 14705 : 1999 Reviewed In : 2019 | Vitreous china crockeryware - Specification |
| 8 | IS 14721 : 1999 Reviewed In : 2019 | Zinc oxide for ceramic industry - Specification |
| 9 | IS 15751 : 2024 | Calcite for Ceramic Industry - Specification First Revision |
| 10 | IS 15752 : 2007 Reviewed In : 2017 | Sericite for ceramic industry - Specification |
| 11 | IS 17985 : 2022 ISO 26602:2017 ISO 14644-1 | Fine ceramics advanced ceramics advanced technical ceramics - Silicon nitride materials for rolling bearing balls and rollers |
| 12 | IS 2333 : 1992 Reviewed In : 2024 | Plaster of paris for ceramic industry - Specification Second Revision |
| 13 | IS 2838 : 1964 Reviewed In : 2024 | Specification for stoneware containers for general purposes |
| 14 | IS 2839 : 1964 Reviewed In : 2024 | Specification for industrial stoneware |
| 15 | IS 2840 : 2021 ISO 22915 Part 12 :2015 | China Clay for Ceramic Industry - Specification |
| 16 | IS 2857 : 2002 Reviewed In : 2018 | Earthenware crockeryware - Specification Third Revision |
| 17 | IS 3149 : 1994 Reviewed In : 2019 | Enamelware for home use - Specification Second Revision |
| 18 | IS 3505 : 2002 Reviewed In : 2018 | Porcelain crockeryware - Specification Third Revision |
| 19 | IS 4589 : 2022 ISO7229:2022 | Plastic Clay and Washed Plastic Clay for Ceramic Industry - Specification Fourth Revision |
| 20 | IS 6988 : 2002 Reviewed In : 2018 | Fine Bone china crockeryware - Specification Second Revision |
| 21 | IS 7087 : 1979 Reviewed In : 2023 | Specification for ceramic tower packings First Revision |
| 22 | IS 7775 : 1975 Reviewed In : 2019 | Specification for ceramic grinding media and lining |
| 23 | IS 9749 : 2020 | Potash Feldspar and Soda Feldspar for Glass and Ceramic Industry Specification Second Revision |

