### **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	Powdered talc for ceramic industry	March, 2017	March, 2017 1	
	Reviewed In: 2017	- Specification (First Revision)			
2	IS 11464 : 2021	QUARTZ FOR CERAMIC		-	Indigenous
		INDUSTRY SPECIFICATION			
3	IS 11475 : 2002	Stoneware crockeryware -	January, 2018	-	Indigenous
	Reviewed In: 2018	Specification (Second Revision)			
4	IS 11477 : 2011	Pyrophyllite for ceramic industry -	March, 2021	-	Indigenous
	Reviewed In: 2021	Specification (First Revision)			
5	IS 12038 (Part 1):	Vitreous and porcelain enamels -	March, 2017	-	Identical under dual
	2007	Release of lead and cadmium from			numbering
	ISO 4531-1	enamelled ware in contact with			
	Reviewed In: 2017	food: Part 1 method of test (First			
	ISO 4531-1	Revision)			
6	IS 12038 (Part 2):	Vitreous and porcelain enamels -	March, 2017	-	Identical under dual
	2007	Release of lead and cadmium from			numbering
	ISO 4531-2	enamelled ware in contact with			
	Reviewed In: 2017	food: Part 2 permissible limits			
	ISO 4531-2	(First Revision)			
7	IS 12621 : 1988	Bentonite for ceramic industry -	December, 2022	2	Indigenous
	Reviewed In: 2022	Specification			
8	IS 13273: 1991	Vitreous enamelled inner tanks for	March, 2024	1	Indigenous
		storage water heater - specification			
9	IS 14179 : 1999	Methods of test for ceramic	November, 2019	-	Indigenous
	Reviewed In: 2019	tableware			
10	IS 14705 : 1999	Vitreoljs china crockeryware -	November, 2019	-	Indigenous
	Reviewed In: 2019	Specification			
11	IS 14721 : 1999	Zinc oxide for ceramic industry -	November, 2019	-	Indigenous
	Reviewed In: 2019	Specification			
12	IS 15751 : 2007	Calcite for ceramic industry -	March, 2017	-	Indigenous
	Reviewed In: 2017	Specification			
13	IS 15751 : 2024	Calcite for Ceramic Industry		-	Indigenous
		â€"Specification (First Revision)			
14	IS 15752 : 2007	Sericite for ceramic industry -	March, 2017	1	Indigenous
				1	

	Reviewed In: 2017	Specification		1	
15	IS 17502 : 2020	Methylene Blue Index of Clay -		-	Indigenous
		Method of Test			
16	IS 17933 : 2022	Fine ceramics advanced ceramics		_	Identical under dual
10	ISO 14704 : 2016	advanced technical ceramics $\ddot{i}_{i}$ /2			numbering
	ISO 14704 : 2016	Test method for flexural strength			namouning
	100 11,0112010	of monolithic ceramics at room			
		temperature			
17	IS 17934 : 2022	Fine ceramics advanced ceramics		-	Identical under dual
	ISO 20501 : 2019	advanced technical ceramics			numbering
	ISO 20501 : 2019	Weibull statistics for strength data			
18	IS 17935 : 2022	Fine ceramics (advanced ceramics		-	Identical under dual
	ISO 18754 : 2020	advanced technical ceramics) �			numbering
	ISO 18754 : 2020	Determination of density and			
10	IS 17936 : 2022	apparent porosity			I.d., at
19	ISO 20507 : 2014	Fine ceramics (advanced ceramics, advanced technical ceramics) -		-	Identical under dual
	ISO 20507 : 2014 ISO 20507 : 2014	Vocabulary			numbering
20	IS 17975 : 2022	Fine ceramics advanced ceramics		-	Identical under dual
	ISO 14627 : 2012	advanced technical ceramics $\ddot{i}_{i}^{1/2}$			numbering
	ISO 14627 : 2012	Test method for fracture resistance			
		of silicon nitride materials for			
		rolling bearing balls at room			
		temperature by indentation fracture			
		IF method			
21	IS 17981 : 2022	Fine ceramics advanced ceramics		-	Identical under dual
	ISO 17561 : 2016	advanced technical ceramics �			numbering
	ISO 17561 : 2016	Test method for elastic moduli of			
		monolithic ceramics at room			
22	IS 17985 : 2022	temperature by sonic resonance Fine ceramics (advanced ceramics		_	Identical under dual
22	ISO 26602:2017	advanced technical ceramics) $\ddot{i}_{i}$ /2			numbering
	ISO 26602:2017	Silicon nitride materials for rolling			namoering
	150 2000212017	bearing balls and rollers			
23	IS 17991 : 2022	Fine ceramics advanced ceramics		-	Identical under dual
	ISO 14705 : 2016	advanced technical ceramics �			numbering
	ISO 14705 : 2016	Test method for hardness of			
		monolithic ceramics at room			
		temperature			
24	IS 18221 : 2023	Fine ceramics advanced ceramics		-	Identical under dual
	ISO 17562 : 2016	advanced technical ceramics i; ½			numbering
	ISO 17562 : 2016	Test method for linear thermal			
		expansion of monolithic ceramics by push-rod technique			
25	IS 2333 : 1992	Plaster of paris for ceramic	March, 2024	1	Indigenous
23	Reviewed In : 2024	industry - Specification (Second	1,141011, 2027		marganous
		Revision)			
26	IS 2717 : 1979	Glossary of terms relating to	March, 2024	1	Indigenous
	Reviewed In: 2024	vitreous enamelware and ceramic -			
		Metal systems (First Revision)			
27	IS 2781 : 2020	Glossary of Terms Relating to	-	-	Indigenous
		Ceramicware (Third Revision)			
20	10 2020 - 1074	Charlingtian for star and	Marsh 2024	2	To di con
28	IS 2838 : 1964	Specification for stoneware	March, 2024	3	Indigenous
29	Reviewed In: 2024 IS 2839: 1964	containers for general purposes  Specification for industrial	March, 2024	4	Indigenous
4J	Reviewed In : 2024	-	1 <b>v1a1C11</b> , 2024		murgenous
30	IS 2840 : 2021	CHINA CLAY FOR CERAMIC		-	Indigenous
-				1	

ĺ		INDUSTRY SPECIFICATION		1	1
31	IS 2857 : 2002	Earthenware crockeryware -	January, 2018	-	Indigenous
	Reviewed In: 2018	Specification (Third Revision)	J		
32	IS 3149 : 1994	Enamelware for home use -	November, 2019	1	Indigenous
	Reviewed In: 2019	Specification (Second Revision)			_
33	IS 3505 : 2002	Porcelain crockeryware -	January, 2018	-	Indigenous
	Reviewed In: 2018	Specification (Third Revision)			
34	IS 3972 (Part 1/Sec	Methods Of Test For Vitreous		-	Identical under dual
	1): 2020	Enamelware Part 1 Production Of			numbering
	ISO 28764	Specimens For Testing			
	ISO 28764				
35	IS 3972 (Part 1/Sec	Methods of test for vitrfous	November, 2020	2	Not Equivalent
	2):1982	enamelware: Part 1 preparation of			
	Reviewed In: 2020	specimen for testing: Sec 2			
2.5		enamelled cast iron (First Revision)			N . T . 1 . 1
36	IS 3972 (Part 2/Sec	METHODS OF TEST FOR		-	Not Equivalent
	2): 2023	VITREOUS ENAMELWARE			
	ISO 2746:2015, ISO				
	8289-1:2020, ISO 8289-2:2019	SECTION 2 LOW AND HIGH VOLTAGE TESTS FOR			
	0209-2:2019	DETECTING AND LOCATING			
		DEFECTS Second Revision			
37	IS 3972 (Part 2/Sec	Methods of Test for Vitreous		_	Identical under dual
"	3): 2020	Enamelware Part 2 Test Methods	-		numbering
	ISO 28706-2 : 2017	Section 3 Resistance to boiling			numbering
	ISO 28706-2:2017	acids, boiling liquids, alkaline			
	150 20700 2.2017	liquids and their vapours (Second			
		Revision)			
38	IS 3972 (Part 2/Sec	Methods of Test for Vitreous	_	_	Identical under dual
	4): 2020	Enamelware Part 2 Test Methods			numbering
	ISO 2747 : 1998	Section 4 Resistance to thermal			
	ISO 2747	shock ( Second Revision )			
39	IS 3972 (Part 2/Sec	Methods of Test for Vitreous	-	-	Identical under dual
	5): 2020	Enamelware Part 2 Test Methods			numbering
	ISO 28706-4 : 2016	Section 5 Resistance to hot alkali (			
	ISO 28706-4	Second Revision )			
40	IS 3972 (Part 2/Sec	Methods of test for vitreous	November, 2019	-	Indigenous
	6): 1988	enamelware: Part 2 test methods:			
	Reviewed In: 2019	Sec 6 reflectance and specular			
<u> </u>	70.00=0 =	gloss (First Revision)			
41	IS 3972 (Part 2/Sec	Methods of test for vitreous	March, 2022	-	Not Equivalent
	8):1990	enamelware: Part 2 test methow:			
	Reviewed In: 2022	Sec 8 resistance to heat (First			
42	ISO 4350	Revision) Methods of test for vitreous	November 2010	1	Not Equipolant
42	IS 3972 (Part 2/Sec 9) : 1991	enamelware: Part 2 test methods:	November, 2019	1	Not Equivalent
	ŕ	Sec 9 resistance to dilute sulphuric			
	ISO 8290	acid (First Revision)			
43	IS 3972 (Part 2/Sec	Methods of test for vitreous	March, 2017	_	Not Equivalent
¬3	11): 1995	enamelware: Part 2 test methods:	17101011, 2017		1 tot Equivalent
	· · · · · · · · · · · · · · · · · · ·	Sec 11 resistance to abrasion (First			
	ISO 6370-1,2	Revision)			
44	IS 3972 (Part 2/Sec	Methods of test for vitreous	November, 2019	-	Indigenous
''	12): 1999	enamelware: Part 2 test methods:	2.2.2		
	Reviewed In: 2019	Sec 12 resistance to torsion (First			
		Revision)			
45	IS 3972 (Part 2/Sec	Methods of test for vitreous	March, 2021	-	Indigenous
	13): 2007	enamelware: Part 2 test methods:	,		
	· ·	Sec 13 resistance to warpage (First			
l				I	1

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

# **Standards under Development**

	Projects Approved				
SI. No.	SI. No. Doc No. Title				
	No Records Found				

	Preliminary Draft Standards				
SI. No.	SI. No. Doc No. Title				
	No Records Found				

	Drafts Standards in WC Stage				
SI. No.	Doc No.	Title			
1	CHD 9 (24931)	Clay Utensils Specification			
2	CHD 9 (24977) Revision	STONEWARE CONTAINERS FOR GENERAL PURPOSES SPECIFICATION First Revision			
	of: IS 2838:1964				
3	CHD 9 (24979) Revision	INDUSTRIAL STONEWARE SPECIFICATION First Revision			
	of: IS 2839:1964				
4	CHD 9 (24986) Revision	VITREOUS ENAMELWARE AND CERAMIC-METAL SYSTEMS GLOSSARY Second			

 	L	
of: IS 2717:1979	Revision	

	Draft Standards Completed WC Stage				
SI. No.	Doc No.	Title			
1	CHD 9 (22746) Revision	VITREOUS AND PORCELAIN ENAMELLED MANUFACTURED ARTICLES			
	of: IS 2717:1979	DETERMINATION OF RESISTANCE TO HEAT			
2	CHD 9 (23381) Revision	EARTHENWARE CROCKERYWARE SPECIFICATION Fourth Revision			
	of: IS 2717:1979				
3	CHD 9 (23550) Revision	STONEWARE CROCKERYWARE-SPECIFICATION Third Revision			
	of: IS 2717:1979				
4	CHD 9 (23551) Revision	FINE BONE CHINA CROCKERYWARE SPECIFICATION			
	of: IS 2717:1979				
5	CHD 9 (23552) Revision	PORCELAIN CROCKERYWARE SPECIFICATION			
	of: IS 2717:1979				
6	CHD 9 (24073) Revision	PLASTER OF PARIS FOR CERAMIC AND GLASS INDUSTRY SPECIFICATION Third			
	of: IS 2717:1979	Revision			
7	CHD 9 (24968) Revision	VITREOUS ENAMELLED INNER TANKS FOR STORAGE WATER HEATER			
	of: IS 2717:1979	SPECIFICATION First Revision			
8	CHD 9 (24974) Revision	METHODS OF TEST FOR VITREOUS ENAMELWARE PART 2 TEST METHODS SECTION			
	of: IS 2717:1979	12 RESISTANCE TO TORSION Second Revision			

	Finalized Draft Indian Standard				
SI. No.	SI. No. Doc No. Title				
	No Records Found				

	Finalized Draft Indian Standards under Print				
SI. No.	Doc No.	Title			
1	CHD 9 (20396) Revision	Vitreous Enamelware Part 2 Test Methods Section 11 Resistance to Abrasion Second Revision			
	of: IS 3972:1995				
2	CHD 9 (21261) Revision	Vitreous and porcelain enamels - Release from enamelled articles in contact with food - Methods			
	of: IS 12038:2007	of test and limits second revision			

#### Total Published Standards:55 Total Standards Under development:14

### **Aspect Wise Report**

Product: 23 Code of Practices: 0 Methods of Test: 26 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):	Methods of test for vitreous enamelware Part 1 Preparation of specimen for testing Sec 2
	1982	Enamelled cast iron
2	IS 12038 : 1987	Permissible Limits and Test Methods for Toxic Materials Released from Enamelware in Contact

	Reviewed In: 2012	with Food
3	IS 3972 : 1968	Methods Of Test For Vitreous Enamelware
4	IS 3972 (Part 2/Sec 1): 2020 ISO 28706-1: 2008 ISO 28706-1	Methods of Test for Vitreous Enamelware Part 2 Test Methods Section 1 Resistance to corrosion by dilute acids at room temperature Second Revision
5	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**

SI. No.	IS No. & Year	Title
1	IS 10429 : 2011	Powdered talc for ceramic industry - Specification First Revision
	Reviewed In: 2017	
2	IS 11464 : 2021	QUARTZ FOR CERAMIC INDUSTRY SPECIFICATION
	ISO 14533-3:2017	
3	IS 11475 : 2002	Stoneware crockeryware - Specification Second Revision
	Reviewed In: 2018	
4	IS 11477 : 2011	Pyrophyllite for ceramic industry - Specification First Revision
	Reviewed In: 2021	
5	IS 12621 : 1988	Bentonite for ceramic industry - Specification
	Reviewed In: 2022	
6	IS 13273 : 1991	Vitreous enamelled inner tanks for storage water heater - specification
	Reviewed In: 2024	
7	IS 14705 : 1999	Vitreoljs china crockeryware - Specification
	Reviewed In: 2019	
8	IS 14721 : 1999	Zinc oxide for ceramic industry - Specification
	Reviewed In: 2019	
9	IS 15751 : 2024	Calcite for Ceramic Industry Specification First Revision
10	IS 15752 : 2007	Sericite for ceramic industry - Specification
	Reviewed In: 2017	
11	IS 17985 : 2022	Fine ceramics advanced ceramics advanced technical ceramics Silicon nitride materials for rolling
	ISO 26602:2017	bearing balls and rollers
12	IS 2333 : 1992	Plaster of paris for ceramic industry - Specification Second Revision
	Reviewed In: 2024	
13	IS 2838 : 1964	Specification for stoneware containers for general purposes
	Reviewed In: 2024	
14	IS 2839 : 1964	Specification for industrial stoneware
	Reviewed In: 2024	
15	IS 2840 : 2021	CHINA CLAY FOR CERAMIC INDUSTRY SPECIFICATION
	ISO 22915 Part 12 :2015	
16	IS 2857 : 2002	Earthenware crockeryware - Specification Third Revision
	Reviewed In: 2018	
17	IS 3149 : 1994	Enamelware for home use - Specification Second Revision
	Reviewed In: 2019	
18	IS 3505 : 2002	Porcelain crockeryware - Specification Third Revision
	Reviewed In: 2018	
19	IS 4589 : 2022	Plastic Clay and Washed Plastic Clay for Ceramic Industry Specification Fourth Revision
	ISO7229:2022	
20	IS 6988 : 2002	Fine Bone china crockeryware - Specification Second Revision
	Reviewed In: 2018	
21	IS 7087 : 1979	Specification for ceramic tower packings First Revision
	Reviewed In: 2023	
22	IS 7775 : 1975	Specification for ceramic grinding media and lining

		Reviewed In: 2019	
23	3	IS 9749 : 2020	Potash Feldspar and Soda Feldspar for Glass and Ceramic Industry Specification Second Revision