

BUREAU OF INDIAN STANDARDS

Program of Work

CHD 6 : Industrial Gases

Scope: a) To formulate Indian Standards for terminology; methods of sampling and test; codes of practice and specifications for industrial gases including high purity speciality gases and gas mixtures other than LPG. b) To liaise with i) ISO/TC 158 Analysis of gases

Liaison: ISO TC-158 (O): *Analysis of gases*

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 1090:2002 <i>Reviewed In : 2023</i>	Compressed Hydrogen - Specification (Third Revision)	December, 2023	1	Indigenous
2	IS 13490:2024	HANDLING OF SPECIALITY GASES & CODE OF PRACTICE (First Revision)		-	Indigenous
3	IS 15578:2005 <i>Reviewed In : 2021</i>	Code of Practice for Handling and Usage of Gas Mixtures	February, 2021	-	Indigenous
4	IS 15583:2005 <i>Reviewed In : 2021</i>	Compressed Helium Gas - Specification	February, 2021	1	Indigenous
5	IS 16142:2019 ISO 16664 : 2017 <i>Reviewed In : 2024</i> <i>ISO 16664:2017</i>	Gas Analysis - Handling of Calibration Gases and Gas Mixtures - Guidelines (First Revision)	March, 2024	-	Identical under dual numbering
6	IS 16247:2019 ISO 6141 : 2015 <i>Reviewed In : 2024</i> <i>ISO 6141:2015</i>	Gas Analysis - Contents of Certificates for Calibration Gas Mixtures (First Revision)	March, 2024	1	Identical under dual numbering
7	IS 16248:2014 ISO 6144 : 2003 <i>ISO 6144 : 2003</i>	Gas Analysis - Preparation of Calibration Gas Mixtures - Static Volumetric Method	June, 2020	-	Identical under dual numbering
8	IS 16249 (Part 10):2015 ISO 6145-10 : 2002 <i>ISO 6145-10 : 2002</i>	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Volumetric Methods: Part 10 Permeation Method	June, 2020	-	Identical under dual numbering
9	IS 16249 (Part 1):2021 ISO 6145 (part 1):2020 <i>ISO 6145 (part 1):20</i>	Gas Analysis Preparation of Calibration Gas Mixtures Using Dynamic Methods Part 1 General Aspects		-	Identical under dual numbering
10	IS 16249 (Part 5):2015 ISO 6145-5 : 2009 <i>ISO 6145-5 : 2009</i>	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Volumetric Methods: Part 5 Capillary Calibration Devices	June, 2020	-	Identical under dual numbering
11	IS 16249 (Part 8):2015 ISO 6145-8 : 2005	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Volumetric Methods:	June, 2020	-	Identical under dual numbering

	ISO 6145-8 : 2005	Part 8 Diffusion Method			
12	IS 16249 (Part 4):2015 ISO 6145-4 : 2004 ISO 6145-4 : 2004	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Volumetric Methods: Part 4 Continuous Syringe Injection Method	June, 2020	-	Identical under dual numbering
13	IS 16249 (Part 9):2015 ISO 6145-9 : 2009 ISO 6145-9 : 2009	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Volumetric Methods: Part 9 Saturation Method	June, 2020	-	Identical under dual numbering
14	IS 16249 (Part 11):2015 ISO 6145-11 : 2005 ISO 6145-11 : 2005	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Volumetric Methods: Part 11 Electrochemical Generation	June, 2020	-	Identical under dual numbering
15	IS 16249 (Part 2):2019 ISO 6145-2 : 2019 Reviewed In : 2024 ISO 6145-2:2014	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Methods: Part 2 Piston Pumps (First Revision)	March, 2024	-	Identical under dual numbering
16	IS 16249 (Part 6):2019 ISO 6145-6 : 2017 Reviewed In : 2024 ISO 6145-6:2017	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Methods: Part 6 Critical Flow Orifices (First Revision)	March, 2024	-	Identical under dual numbering
17	IS 16249 (Part 7):2020 ISO 6145-7 : 2018 Reviewed In : 2024 ISO 6145 (part 7):20	Gas Analysis - Preparation of Calibration Gas Mixtures Using Dynamic Methods Part 7 Thermal Mass-Flow Controllers (First Revision)	September, 2024	-	Identical under dual numbering
18	IS 16250:2015 ISO 15796 : 2005 ISO 15796 : 2005	Gas Analysis Investigation and Treatment of Analytical Bias	June, 2020	-	Identical under dual numbering
19	IS 16252:2014 ISO 14912 : 2003 Reviewed In : 2020 ISO 14912 : 2003	Gas Analysis - Conversion of Gas Mixture Composition Data	June, 2020	-	Identical under dual numbering
20	IS 16253:2016 ISO 26142 : 2010 Reviewed In : 2021 ISO 26142 : 2010	Hydrogen Detection Apparatus - Stationary Applications	November, 2021	-	Identical under dual numbering
21	IS 16260:2019 ISO 6142-1 : 2015 Reviewed In : 2024 ISO 6142-1 : 2015	Gas Analysis Preparation of Calibration Gas Mixtures Gravimetric Method for Class 1 Mixtures (First Revision)	March, 2024	1	Identical under dual numbering
22	IS 16264:2014 ISO 6143 : 2001 Reviewed In : 2020 ISO 6143 : 2001	Gas Analysis - Comparison Methods for Determining and Checking the Composition of Calibration Gas Mixtures	June, 2020	-	Identical under dual numbering
23	IS 16509:2020 ISO 22734 : 2019 Reviewed In : 2025 ISO 22734:2019	Hydrogen Generators Using Water Electrolysis - Industrial, Commercial and Residential Applications (First Revision)	March, 2025	-	Identical under dual numbering
24	IS 16512 (Part 1):2016 ISO 16110-1 : 2007 Reviewed In : 2021 ISO 16110-1 : 2007	Hydrogen Generators Using Fuel Processing Technologies: Part 1 Safety	October, 2021	-	Identical under dual numbering
25	IS 16749:2018	Basic Considerations for the Safety	March, 2024	-	Identical under dual

	ISO/TR 15916 : 2015 Reviewed In : 2024 ISO/TR 15916:2015	of Hydrogen Systems			numbering
26	IS 1747:2023	Nitrogen Compressed Gas and Liquid-Specification Second Revision		-	Indigenous
27	IS 2432:2024	LIQUID SULPHUR DIOXIDE ½ SPECIFICATION (Second Revision)		-	Indigenous
28	IS 307:2024	Carbon Dioxide ½ Specification (Third Revision)		-	Indigenous
29	IS 308:2024	Dissolved Acetylene (Gas) “ Specification (Fourth Revision)		-	Indigenous
30	IS 309:2023	Oxygen Compressed Gas and Liquid-Specification (Fifth Revision)		-	Indigenous
31	IS 5610:2025	REFRIGERANTS - SPECIFICATION (Third Revision)		-	Indigenous
32	IS 5760:1998 Reviewed In : 2021	Argon, Compressed and Liquid - Specification (Second Revision)	February, 2021	1	Indigenous
33	IS 7062:2024	OIL & GAS INDUSTRY - GLOSSARY OF TERMS (First Revision)		-	Indigenous
34	IS 7278:2024	Methyl chloride - Specification (Second Revision)		-	Indigenous
35	IS/ISO 8573-9:2004 ISO 8573-9 : 2004 ISO 8573-9:2004	Compressed Air: Part 9 Test Methods for Liquid Water Content	June, 2020	-	Identical under single numbering
36	IS/ISO 8573-8:2004 ISO 8573-8 : 2004 ISO 8573-8: 2004	Compressed Air: Part 8 Test Methods for Solid Particle Content by Mass Concentration	June, 2020	-	Identical under dual numbering
37	IS/ISO 8573-3:1999 ISO 8573-3 : 1999 ISO 8573-3 : 1999	Compressed Air: Part 3 Test Methods for Measurement of Humidity	June, 2020	-	Identical under single numbering
38	IS/ISO 8573-6:2003 ISO 8573-6 : 2003 ISO 8573-6: 2003	Compressed Air: Part 6 Test Methods for Gaseous Contaminant Content	June, 2020	-	Identical under dual numbering
39	IS/ISO 8573-7:2003 ISO 8573-7 : 2003 ISO 8573-7:2003	Compressed Air: Part 7 Test Method for Viable Microbiological Contaminant Content	June, 2020	-	Identical under single numbering
40	IS/ISO 8573-1:2010 ISO 8573-1 : 2010 Reviewed In : 2022 ISO 8573-1 : 2010	Compressed Air: Part 1 Contaminants and Purity Classes (First Revision)	March, 2022	-	Identical under dual numbering
41	IS/ISO 8573-2:2018 ISO 8573-2 : 2007 Reviewed In : 2024 ISO 8573-2 : 2018	Compressed Air - Contaminant Measurement Part 2 Oil Aerosol Content (First Revision)	September, 2024	-	Identical under dual numbering
42	IS/ISO 8573-4:2019 ISO 8573-4:2019 Reviewed In : 2024 ISO 8573-4:2019	Compressed Air Contaminant Measurement Part 4 Particle Content	March, 2024	-	Identical under single numbering
43	IS/ISO 8573-5:2001 ISO 8573-5 : 2001 Reviewed In : 2020 ISO 8573-5: 2001	Compressed Air: Part 5 Test Methods for Oil Vapour And Organic Solvent Content	June, 2020	-	Identical under single numbering

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
<i>No Records Found</i>		

Draft Standards Completed WC Stage

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

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
1	CHD 6 (27637)	Efficiency Assessment of Anion Exchange Membrane Proton Exchange Membrane and Alkaline Water Electrolyzers

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	CHD 6 (33179)	Gas analysis Preparation of calibration gas mixtures Part 2 Gravimetric method for Class II mixtures
2	CHD 6 (33183)	Gas analysis Comparison methods for the determination of the composition of gas mixtures based on one- and two-point calibration
3	CHD 6 (33184)	Gas mixtures Gravimetric preparation Mastering correlations in composition
4	CHD 6 (33185)	Gas analysis Analytical methods for hydrogen fuel Proton exchange membrane PEM fuel cell applications for road vehicles
5	CHD 6 (33186)	Gas analysis Sampling guidelines
6	CHD 6 (33188)	Gas analysis Purity analysis and the treatment of purity data
7	CHD 6 (33189)	Gas analysis General quality aspects and metrological traceability of calibration gas mixtures
8	CHD 6 (33190)	Compressed Air Part 5 Test Methods for Oil Vapour And Organic Solvent Content
9	CHD 6 (33191)	Gas Analysis - Comparison Methods for Determining and Checking the Composition of Calibration Gas Mixtures
10	CHD 6 (33192)	Gas Analysis - Conversion of Gas Mixture Composition Data
11	CHD 6 (33194)	Argon Compressed and Liquid - Specification Second Revision
12	CHD 6 (33196)	Compressed Helium Gas - Specification

Total Published Standards:43 Total Standards Under development:13

Aspect Wise Report

Product : 12
 Code of Practices : 2
 Methods of Test : 10
 Terminology : 1
 Dimensions : 0
 System Standard : 0

Safety Standard : 3
 Others : 15
 Service Specification : 0
 Process Specification : 0
 Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 14642 (Part 2):1999 Reviewed In : 2014 ISO 8573-2:1996	Compressed air for general use Part 2 test methods for aerosol oil content
2	IS 16061 (Part 2):2016 ISO 14687-2 : 2012 ISO 14687-2 : 2012	Hydrogen fuel - Product specification Part 2 proton exchange membrane PEM fuel cell applications for road vehicles
3	IS 16509 (Part 1):2016 ISO 22734-1 : 2008 ISO 22734-1 : 2008	Hydrogen generators using water electrolysis process Part 1 industrial and commercial applications
4	IS 3551:1965	Pure Nitrogen dry

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 1090:2002 Reviewed In : 2023	Compressed Hydrogen - Specification Third Revision
2	IS 15583:2005 Reviewed In : 2021	Compressed Helium Gas - Specification
3	IS 16253:2016 ISO 26142 : 2010 Reviewed In : 2021 ISO 26142 : 2010	Hydrogen Detection Apparatus - Stationary Applications
4	IS 16509:2020 ISO 22734 : 2019 Reviewed In : 2025 ISO 22734:2019	Hydrogen Generators Using Water Electrolysis - Industrial Commercial and Residential Applications First Revision
5	IS 1747:2023 ISO 2969 : 2015	Nitrogen Compressed Gas and Liquid-Specification Second Revision
6	IS 2432:2024	LIQUID SULPHUR DIOXIDE SPECIFICATION Second Revision
7	IS 307:2024	Carbon Dioxide Specification Third Revision
8	IS 308:2024	Dissolved Acetylene Gas Specification Fourth Revision
9	IS 309:2023	Oxygen Compressed Gas and Liquid-Specification Fifth Revision
10	IS 5610:2025	REFRIGERANTS - SPECIFICATION Third Revision
11	IS 5760:1998 Reviewed In : 2021	Argon Compressed and Liquid - Specification Second Revision
12	IS 7278:2024	Methyl chloride - Specification Second Revision