

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 $\frac{1}{2}$ 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):20 <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 $i_{L/2}$ SPECIFICATION (Second Revision)		-	Indigenous
28	IS 307:2024	Carbon Dioxide $i_{L/2}$ Specification (Third Revision)		-	Indigenous
29	IS 308:2024	Dissolved Acetylene (Gas) â€” 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
No Records Found		

Preliminary Draft Standards

SI. No.	Doc No.	Title
No Records Found		

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
No Records Found		

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 Electrolysers

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

Sl. 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

Sl. 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