

ISO 14687:2019-11 (E)

Hydrogen fuel quality - Product specification

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Classification and application	3
4.1	Classification	3
4.2	Application	3
5	Hydrogen quality requirements for PEM fuel cell road vehicle application	4
5.1	Fuel quality specification	4
5.2	Analytical method	5
5.3	Sampling	5
5.4	Hydrogen quality control	5
6	Hydrogen and hydrogen-based fuels, quality requirements for PEM fuel cell stationary applications	6
6.1	Fuel quality specification	6
6.2	Quality verification	7
6.2.1	General requirements	7
6.2.2	Analytical requirements of the qualification tests	7
6.2.3	Report results	8
6.3	Sampling	8
6.3.1	Sample size	8
6.3.2	Selection of the sampling point	8
6.3.3	Sampling procedure	8
6.3.4	Particulates in gaseous hydrogen	8
7	Hydrogen quality requirements for applications other than PEM fuel cell road vehicle and stationary applications	8
7.1	Fuel quality specification	8
7.2	Quality verification	9
7.2.1	General requirements	9
7.2.2	Production qualification tests	10
7.3	Sampling	10
7.3.1	Sample size	10
7.3.2	Gaseous samples	10
7.3.3	Liquid samples (vaporized)	10
Annex A (informative)	Guidance on the selection of the boundary point for PEM fuel cell stationary applications	11
Annex B (informative)	Rationale for the selection of hydrogen impurities to be measured for PEM fuel cell stationary applications	14
Annex C (informative)	Pressure swing adsorption and applicability of CO as an indicator for PEM fuel cell stationary applications	16
Bibliography		17