

ISO 21087:2019 (E)

Gas analysis — Analytical methods for hydrogen fuel — Proton exchange membrane (PEM) fuel cell applications for road vehicles

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Symbols
5	Quality characteristics of the fuel
6	Requirements for analytical method validation and fit for purpose
6.1	General
6.2	Characteristics for analytical methods
6.2.1	List of main characteristics
6.2.2	Selectivity
6.2.2.1	Definition and estimation
6.2.2.2	Fit for purpose for H2 analysis
6.2.3	Limit of detection and limit of quantification
6.2.3.1	Definition and calculation
6.2.3.2	Fit for purpose for H2 analysis
6.2.4	Working range
6.2.4.1	Definition and calculation
6.2.4.2	Fit for purpose for H2 analysis
6.2.5	Trueness
6.2.5.1	Definition and calculation
6.2.5.2	Fit for purpose for H2 analysis
6.2.6	Precision
6.2.6.1	Definition and calculation
6.2.6.2	Fit for purpose for H2 analysis
6.2.7	Measurement uncertainty
6.2.7.1	Definition and calculation
6.2.7.2	Fit for purpose for H2 analysis
6.2.8	Ruggedness (Robustness)
6.2.8.1	Definition and calculation
6.2.8.2	Fit for purpose for H2 analysis
6.3	Validation report
6.4	Quality control of the analytical method
7	Analytical techniques
8	Sampling
8.1	Sampling strategy
8.2	Sampling vessels
8.3	Samples
9	Analytical report