

ISO 2611-1:2024-04 (E)

Analysis of natural gas - Halogen content of biomethane - Part 1: HCl and HF content by ion chromatography

Contents		Page
Foreword.....		v
Introduction.....		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	2
	4.1 Symbols.....	2
	4.2 Abbreviated terms.....	2
5	Principle	3
6	Reagents and consumables	3
	6.1 General.....	3
	6.2 Water.....	3
	6.3 Aqueous solutions.....	3
	6.4 Chloride and fluoride stock standard solutions.....	3
	6.5 Chloride and fluoride standard solutions.....	3
	6.6 Chloride and fluoride calibration solutions.....	4
	6.7 Blank.....	4
	6.8 Eluents.....	4
	6.9 Quartz filters.....	4
	6.10 Syringe filters.....	4
	6.11 Sorbent tubes.....	4
7	Apparatus	4
	7.1 General.....	4
	7.2 Ion chromatography system.....	4
	7.3 Quality requirements for the separator column.....	5
8	Sampling and sample pre-treatment	5
	8.1 General.....	5
	8.2 Sampling equipment.....	5
	8.2.1 Filter.....	5
	8.2.2 Cartridges.....	5
	8.2.3 Pump.....	6
	8.3 Sampling.....	6
	8.3.1 Filter-based method.....	6
	8.3.2 Cartridge-based method.....	6
	8.3.3 Gas volume measurement.....	6
	8.4 Sample pre-treatment.....	6
	8.4.1 Filter-based method.....	6
	8.4.2 Cartridges-based method.....	6
9	Procedure	7
	9.1 General.....	7
	9.2 Calibration.....	7
	9.3 Measurement.....	7
10	Calculation	7
11	Expression of results	8

12	Performance characteristics	9
12.1	Calibration check	9
12.2	Performance data	9
13	Test report	9
Annex A (informative)	Characteristics of the method	10
Annex B (informative)	Dynamic generation of HCl and HF	12
Bibliography	13