

DIN EN ISO 2611-1:2024-10 (E)

Analysis of natural gas - Halogen content of biomethane - Part 1: HCl and HF content by ion chromatography (ISO 2611-1:2024)

Contents		Page
European foreword	4
Foreword	5
Introduction	6
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Symbols and abbreviated terms	8
	4.1 Symbols.....	8
	4.2 Abbreviated terms.....	8
5	Principle	9
6	Reagents and consumables	9
	6.1 General.....	9
	6.2 Water.....	9
	6.3 Aqueous solutions.....	9
	6.4 Chloride and fluoride stock standard solutions.....	9
	6.5 Chloride and fluoride standard solutions.....	9
	6.6 Chloride and fluoride calibration solutions.....	10
	6.7 Blank.....	10
	6.8 Eluents.....	10
	6.9 Quartz filters.....	10
	6.10 Syringe filters.....	10
	6.11 Sorbent tubes.....	10
7	Apparatus	10
	7.1 General.....	10
	7.2 Ion chromatography system.....	10
	7.3 Quality requirements for the separator column.....	11
8	Sampling and sample pre-treatment	11
	8.1 General.....	11
	8.2 Sampling equipment.....	11
	8.2.1 Filter.....	11
	8.2.2 Cartridges.....	11
	8.2.3 Pump.....	12
	8.3 Sampling.....	12
	8.3.1 Filter-based method.....	12
	8.3.2 Cartridge-based method.....	12
	8.3.3 Gas volume measurement.....	12
	8.4 Sample pre-treatment.....	12
	8.4.1 Filter-based method.....	12
	8.4.2 Cartridges-based method.....	12
9	Procedure	13
	9.1 General.....	13
	9.2 Calibration.....	13
	9.3 Measurement.....	13
10	Calculation	13

11	Expression of results	14
12	Performance characteristics	15
	12.1 Calibration check.....	15
	12.2 Performance data.....	15
13	Test report	15
Annex A (informative) Characteristics of the method		16
Annex B (informative) Dynamic generation of HCl and HF		18
Bibliography		19