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**