DIN EN ISO 19739:2006-03 (E)

Natural gas - Determination of sulfur compounds using gas chromatography (ISO 19739:2004)

Contents

Page

Foreword 2

Introduction 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 Principle 7

5 Apparatus 7

6 Sampling 8
6.1 Safety precautions 8
6.2 Temperature control 8
6.3 Construction materials 9
6.4 Cleanness 9
6.5 Installation of the calibration gas cylinder 9
6.6 Pressure control 9
6.7 Purging of reduction valve and transfer lines 9
6.8 Flow control 10
6.9 Diffusion control 10
6.10 Automation and sequences of sampling 10

7 Calibration 10

8 Analysis 10

9 Performance characteristics required for sulfur analysis 11

10 Test report 12

Annex A (informative) Columns mostly used in sulfur analysis (with internal phase and dimensions) 13

Annex B (informative) Types of detectors used in sulfur analysis 14

Annex C (informative) GC method using capillary column and FPD 17

Annex D (informative) GC method using ED 23

Annex E (informative) GC method using MSD 29

Annex F (informative) GC method using AED 32

Annex G (informative) GC methods using column switching and FPD 35

Annex H (informative) GC method using capillary column and SCD 47

Annex I (informative) GC method using capillary column and PFPD 54

Bibliography 59