

# DIN EN 15984:2011-07 (E)

## Petroleum industry and products - Determination of composition of refinery heating gas and calculation of carbon content and calorific value - Gas chromatography method

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
1	Scope .....	4
2	Principle .....	4
3	Reagents and materials .....	4
4	Apparatus .....	5
5	Gas chromatographic analysis .....	6
5.1	Analysis systems .....	6
5.2	System configuration .....	6
5.3	Columns .....	6
6	Calibration .....	7
6.1	General .....	7
6.2	Absolute response factors .....	7
6.3	Relative response factors .....	7
7	Calculation .....	8
7.1	General .....	8
7.2	Calculation of the non normalized mole fractions .....	8
7.3	Validation of normalized composition (reference components) .....	8
7.4	Calculation of carbon content .....	9
7.5	Calculation of lower calorific value, on mass basis .....	10
8	Expression of results .....	10
9	Precision .....	10
9.1	General .....	10
9.2	Repeatability .....	11
9.3	Reproducibility .....	11
10	Test report .....	11
Annex A (informative) Possible column combination .....		12
Annex B (normative) Detector linearity check .....		17
Annex C (informative) Calculation test data .....		19
Annex D (normative) Data for calculation .....		20
Bibliography .....		21