DIN EN 16136:2015-04 (E)

Automotive fuels - Determination of manganese and iron content in unleaded petrol - I nductively coupled plasma optical emission spectrometry (ICP OES) method

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Principle 4

4 Reagents 4

5 Apparatus 5

6 Sampling 6

7 Preparation of solutions 6
7.1 General 6
7.2 Preparation of the internal standard solution 7
7.3 Preparation of the manganese intermediate solution 7
7.4 Preparation of the iron intermediate solution 7
7.5 Preparation of the calibration solutions 7
7.6 Preparation of quality control solution 7

8 Calibration 8
8.1 General 8
8.2 Calibration of the ICP OES spectrometer 8
8.3 Procedure A 8
8.4 Procedure B 9
8.5 Check of calibration 9

9 Sample analysis 10
9.1 Sample solution preparation 10
9.2 Sample solution measurement 10

10 Calculation 10

11 Expression of results 11

12 Precision 11
12.1 General 11
12.2 Repeatability, r 11
12.3 Reproducibility, R 11

13 Test report 11

Bibliography 13