DIN EN ISO 13032:2012-06 (E)

Petroleum products - Determination of low concentration of sulfur in automotive fuels - Energy-dispersive X-ra y fluorescence spectrometric method (ISO 13032:2012)

Contents

Page

Foreword 3

Introduction 4

1 Scope 5

2 Normative references 5

3 Principle 5

4 Reagents and materials 5
4.1 Diluent oil 5
4.2 Sulfur compounds 6
4.3 Reference materials (CRMs) 6
4.4 Quality control samples 6

5 Apparatus 6
5.1 Energy-dispersive X-ray fluorescence instrument 6

6 Sampling and sample handling 7

7 Apparatus preparation 8
7.1 Analyser 8
7.2 Sample cups 8

8 Calibration 8
8.1 General 8
8.2 Preparation of primary standards 8
8.3 Calibration standards 9
8.4 Calibration procedure 10

9 Procedure 11

10 Calculation 11

11 Expression of results 11

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

13 Test report 12

Annex A (informative) Matrix effects 13

Annex B (normative) Guidelines for measuring low sulfur concentrations 15

Bibliography 16