DIN EN 16144:2012-05 (E)

Liquid petroleum products - Determination of ignition delay and derived cetane number (DCN) of middle distillate fuels - Fixed range injection period, constant volume combustion chamber method

Contents

Page

Foreword 3

Introduction 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 Principle 6

5 Reagents and materials 6

6 Apparatus 7

7 Sampling 9

8 Apparatus assembly and installation 9

9 Preparation of apparatus 9
9.1 System start-up and warm-up 9
9.2 Standard operating conditions 10
9.3 Standard test conditions 10

10 Calibration, verification and quality control 11
10.1 General 11
10.2 Calibration 11
10.3 Apparatus verification 11
10.4 Quality control (QC) 12

11 Test procedure 12

12 Calculation 13

13 Expression of results 13

14 Precision 14
14.1 General 14
14.2 Repeatability 14
14.3 Reproducibility 15

15 Test report 15

Annex A (normative) Combustion analyzer description 16

Annex B (normative) Operational details in support to the standard test procedure 18

Bibliography 21