

DIN EN ISO 22854:2021-10 (E)

Liquid petroleum products - Determination of hydrocarbon types and oxygenates in automotive-motor gasoline and in ethanol (E85) automotive fuel - Multidimensional gas chromatography method (ISO 22854:2021)

Contents	Page
European foreword	3
Foreword	4
Introduction	5
1 Scope	6
2 Normative references	7
3 Terms and definitions	7
4 Principle	8
5 Reagents and materials	8
6 Apparatus	9
7 Sampling	10
8 Procedure	10
8.1 Conditioning	10
8.2 Sample preparation	10
8.2.1 Procedure B only — Sample dilution	10
8.2.2 Procedure A and B — Sample cooling	10
8.3 Test sample injection volume	10
8.4 Verification of the apparatus and test conditions	10
8.5 Validation	10
8.6 Preparation of the test sample	11
8.7 Preparation of the apparatus and test conditions	11
9 Calculation	11
9.1 General	11
9.2 Calculation as % (<i>m/m</i>)	11
9.3 Calculation as % (<i>V/V</i>)	12
9.4 Calculation of total oxygen content in % (<i>m/m</i>)	14
9.5 Data report according to automotive motor gasoline specification	14
10 Expression of results	14
10.1 Procedure A	14
10.2 Procedure B	15
11 Precision	15
11.1 General	15
11.2 Repeatability, <i>r</i>	15
11.3 Reproducibility, <i>R</i>	15
12 Test report	15
Annex A (informative) Instrument specifications	17
Annex B (informative) Examples of typical chromatograms	20
Bibliography	26