

ISO 22854:2014-03 (E)

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

| Contents | | Page |
|--|--|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 2 |
| 3 | Terms and definitions | 2 |
| 4 | Principle | 3 |
| 5 | Reagents and materials | 3 |
| 6 | Apparatus | 4 |
| 7 | Sampling | 5 |
| 8 | Procedure | 5 |
| 8.1 | Conditioning | 5 |
| 8.2 | Sample preparation | 5 |
| 8.3 | Test sample injection volume | 5 |
| 8.4 | Verification of the apparatus and test conditions | 5 |
| 8.5 | Validation | 5 |
| 8.6 | Preparation of the test sample | 6 |
| 8.7 | Preparation of the apparatus and test conditions | 6 |
| 9 | Calculation | 6 |
| 9.1 | General | 6 |
| 9.2 | Calculation as % (m/m) | 6 |
| 9.3 | Calculation as % (V/V) | 8 |
| 9.4 | Calculation of total oxygen content in % (m/m) | 9 |
| 9.5 | Data report according to automotive motor gasoline specification | 10 |
| 10 | Expression of results | 10 |
| 10.1 | Procedure A | 10 |
| 10.2 | Procedure B | 10 |
| 11 | Precision | 10 |
| 11.1 | General | 10 |
| 11.2 | Repeatability, r | 10 |
| 11.3 | Reproducibility, R | 11 |
| 12 | Test report | 11 |
| Annex A (informative) Instrument specifications | | 13 |
| Annex B (informative) Examples of typical chromatograms | | 15 |
| Bibliography | | 20 |