

DIN EN 18051:2025-02 (E)

Automotive fuels - Determination of content of butoxy-benzene in middle distillates - Gas chromatographic method using a flame ionization detector (GC-FID)

Contents		Page
European foreword		3
Introduction		4
1 Scope		5
2 Normative references		5
3 Terms, definitions and abbreviations		5
3.1 Terms and definitions		5
3.2 Abbreviations		5
4 Principle		6
5 Reagents and materials		6
6 Apparatus		6
7 Sampling		8
8 Preparation and handling of working solutions		8
8.1 Preparation of stock calibration solution		8
8.2 Preparation of working calibration solution (WCS)		8
8.3 Preparation of linearity working solution (LWS)		9
8.4 Storage of solutions		9
9 Apparatus preparation		9
9.1 Gas chromatograph preparation		9
9.2 System performance check		9
9.2.1 Determine heart-cutting time		9
9.2.2 Peak skew check		10
9.2.3 Linearity check		10
9.2.4 Determine response factor		11
10 Procedure		11
10.1 Initial step		11
10.2 Validation analysis		11
10.3 Sample analysis		12
11 Calculation		12
12 Expression of results		12
13 Precision		13
13.1 General		13
13.2 Repeatability		13
13.3 Reproducibility		13
14 Test report		13
Annex A (normative) Typical GC settings		14
A.1 Recommended GC setting		14
A.2 Exemplary chromatograms		15
Bibliography		16