DIN EN ISO 12228-1:2014-10 (E)

Determination of individual and total sterols contents - Gas chromatographic method - Part 1: Animal and veg etable fats and oils (ISO 12228-1:2014)

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 4

4 Principle 4

5 Reagents 5

6 Apparatus 6

7 Sample 6
7.1 Sampling 6
7.2 Preparation of the test sample 6

8 Procedure 7
8.1 Preparation of the aluminium oxide column 7
8.2 Test portion 7
8.3 Extraction of the unsaponifiable matter 7
8.4 Thin-layer chromatography 7
8.5 Isolation of the sterols 7
8.6 Preparation of sterol trimethylsilyl ethers 8
8.7 Gas chromatography 8

9 Expression of results 8
9.1 Identification of sterols 8
9.2 Composition of sterols 8
9.3 Determination of the total sterol content 9

10 Precision 10
10.1 Interlaboratory test 10
10.2 Repeatability limit, r 10
10.3 Reproducibility limit, R 10

11 Test report 10

Annex A (informative) Figures 11

Annex B (informative) Interlaboratory trial 18

Bibliography 26