Fatty alcohols, C$_{20}$ – C$_{28}$

Analysis of fatty alcohols in olive oil

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Sil 8 CB column separates 11 C$_{20}$ to C$_{28}$ fatty alcohols in olive oil as TMS derivatives in 23 minutes.
Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 8 CB, 0.22 mm x 15 m fused silica
             WCOT CP-Sil 8 CB (0.12 m)*
Temperature : 210 °C → 260 °C, 6 °C/min
Carrier Gas : H₂, 50 kPa (0.5 bar, 7 psi)
Injector : Splitter, 1:60
            T = 285 °C
Detector : FID
Sample Size : 1 μL

Courtesy : Dr. C. Mariani, Stazione sperimentale degli oli e dei grassi, Via Colombo 79, Milano, Italy

* This column is available as a 25 m column under Part no. CP7711

Peak identification

1. phytol
2. geranyl geraniol
3. fatty alcohol C₂₀
4. fatty alcohol C₂₂ (I.S.)
5. fatty alcohol C₂₄
6. fatty alcohol C₂₆
7. fatty alcohol C₂₈
8. cycloartenol
9. 24-methylene cycloartenol
10. citrostradienol
11. cyclobranol