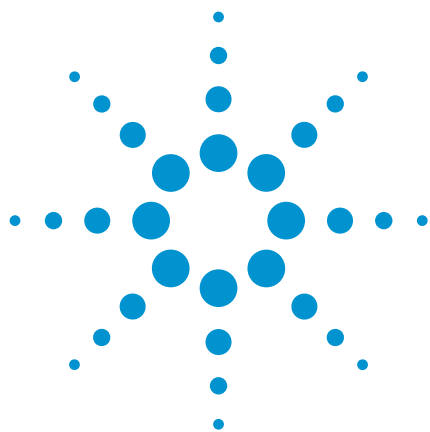




Fatty acid methyl esters, $C_{16} - C_{24}$

Analysis of soya oil

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Sil 88 for FAMES column separates 20 C_{16} to C_{24} fatty acid methyl esters in soya oil in 51 minutes.



Agilent Technologies

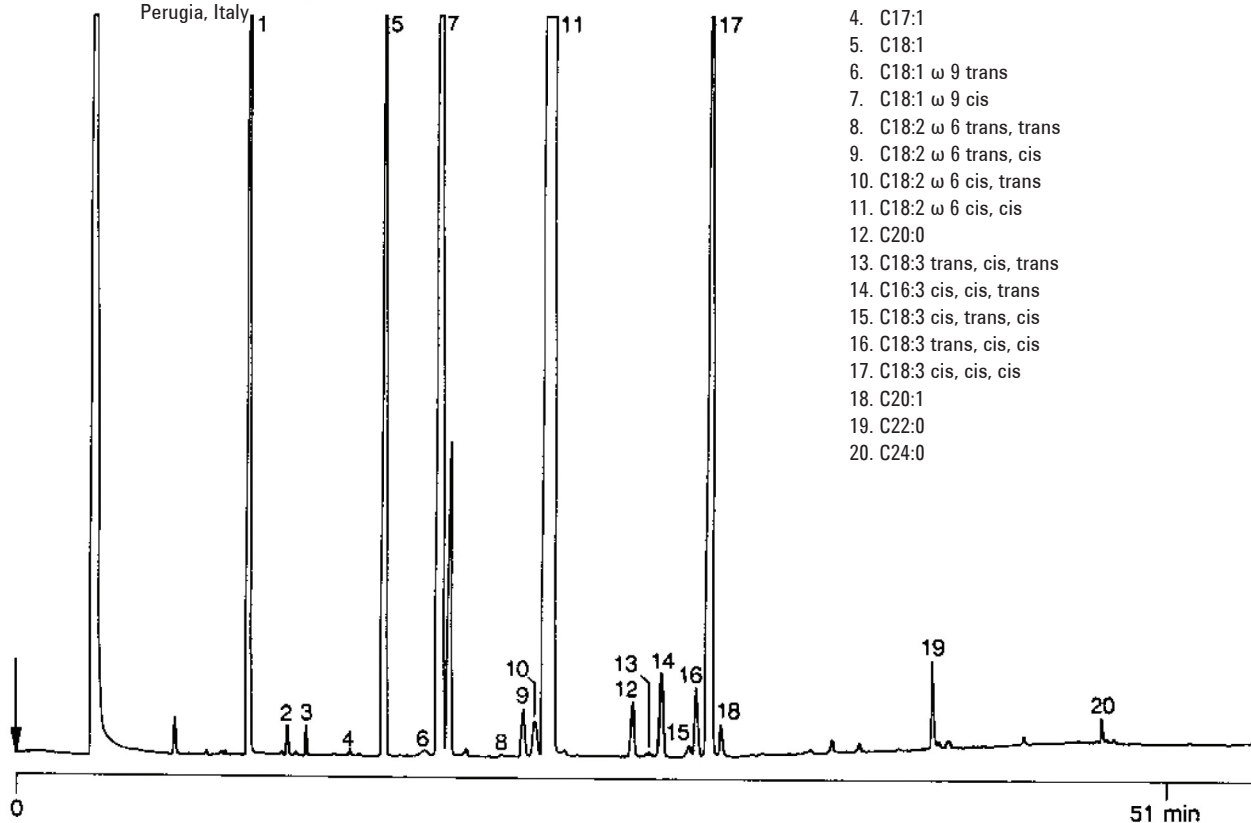
Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 88 for FAMES, 0.25 mm x 50 m fused silica WCOT CP-Sil 88 for FAMES (df = 0.2 µm) (Part no. CP7488)
Temperature : 160 °C (32 min) → 200 °C, 3 °C/min
Carrier Gas : H₂, 70 kPa (0.7 bar, 10 psi)
Injector : Splitter, 1:100
T = 250 °C
Detector : FID, 1 x 10⁻¹² Afs
T = 250 °C
Sample Size : 0.2 µL

Courtesy : Maurizio Ingi,
Ministero dell'Agricoltura e Foreste ispettorato
centrale di Repressione frodi,
Perugia, Italy

Peak identification

1. C16:0
2. C16:1
3. C17:0
4. C17:1
5. C18:1
6. C18:1 ω 9 trans
7. C18:1 ω 9 cis
8. C18:2 ω 6 trans, trans
9. C18:2 ω 6 trans, cis
10. C18:2 ω 6 cis, trans
11. C18:2 ω 6 cis, cis
12. C20:0
13. C18:3 trans, cis, trans
14. C16:3 cis, cis, trans
15. C18:3 cis, trans, cis
16. C18:3 trans, cis, cis
17. C18:3 cis, cis, cis
18. C20:1
19. C22:0
20. C24:0



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This information is subject to change without notice.

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