



## **FAME, C<sub>18</sub>**

# Fatty acid methyl esters of conjugated linoleic acids in soyabean oil

## Application Note

Food Testing & Agriculture

### **Authors**

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### **Introduction**

Gas chromatography using an Agilent CP-Sil 88 column separates 16 fatty acid methyl esters of conjugated linoleic acids in soya bean oil in 50 minutes.



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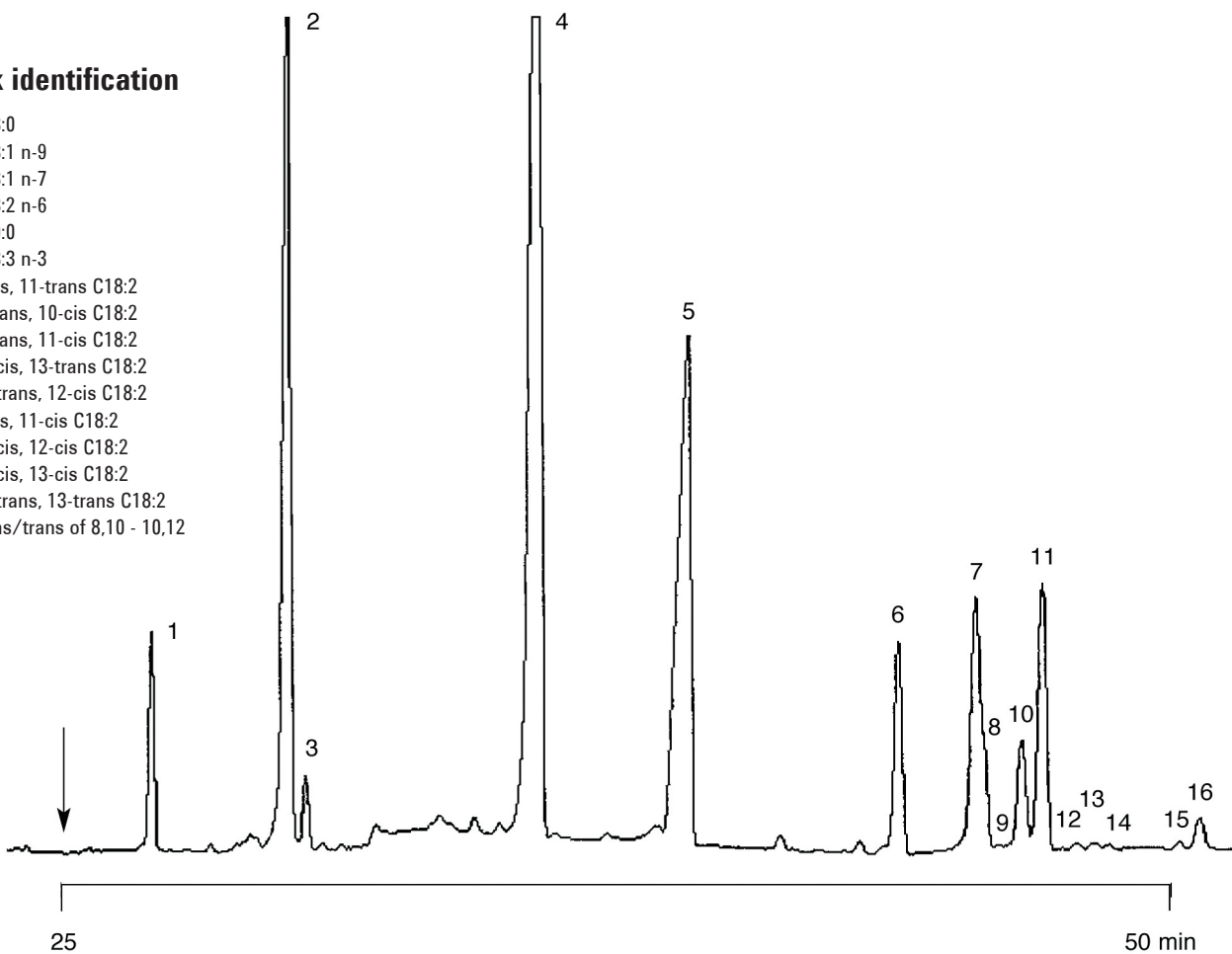
## Conditions

Technique : GC-capillary  
Column : Agilent CP-Sil 88, 0.25 mm x 100 m fused silica  
WCOT (df = 0.2 µm) (Part no. CP7489)  
Temperature : 60 °C (1 min) → 170 °C. 20 °C/min  
Carrier Gas : H<sub>2</sub>, 0.7 mL/min, 100 kPa (1.0 bar, 14 psi)  
Injector : Splitless  
T = 250 °C  
Detector : FID  
T = 280 °C  
Sample Size : soya bean oil

Courtesy : P. Juaneda,  
Institute National de la Recherche agronomique,  
INRA, Dijon

## Peak identification

1. C18:0
2. C18:1 n-9
3. C18:1 n-7
4. C18:2 n-6
5. C20:0
6. C18:3 n-3
7. 9-cis, 11-trans C18:2
8. 8-trans, 10-cis C18:2
9. 9-trans, 11-cis C18:2
10. 11-cis, 13-trans C18:2
11. 10-trans, 12-cis C18:2
12. 9-cis, 11-cis C18:2
13. 10-cis, 12-cis C18:2
14. 11-cis, 13-cis C18:2
15. 11-trans, 13-trans C18:2
16. trans/trans of 8,10 - 10,12



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Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A01649



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