



Fatty acid methyl esters (FAME)

$C_4 - C_{18}$

Separation of $C_4 - C_{18}$ saturated and unsaturated fatty acids as their methyl esters on a fused silica column

Application Note

Materials Testing & Research

Authors

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Introduction

Gas chromatography using an Agilent CP-Sil 88 CB column separates 12 C_4 to C_{18} fatty acid methyl esters in 15 minutes



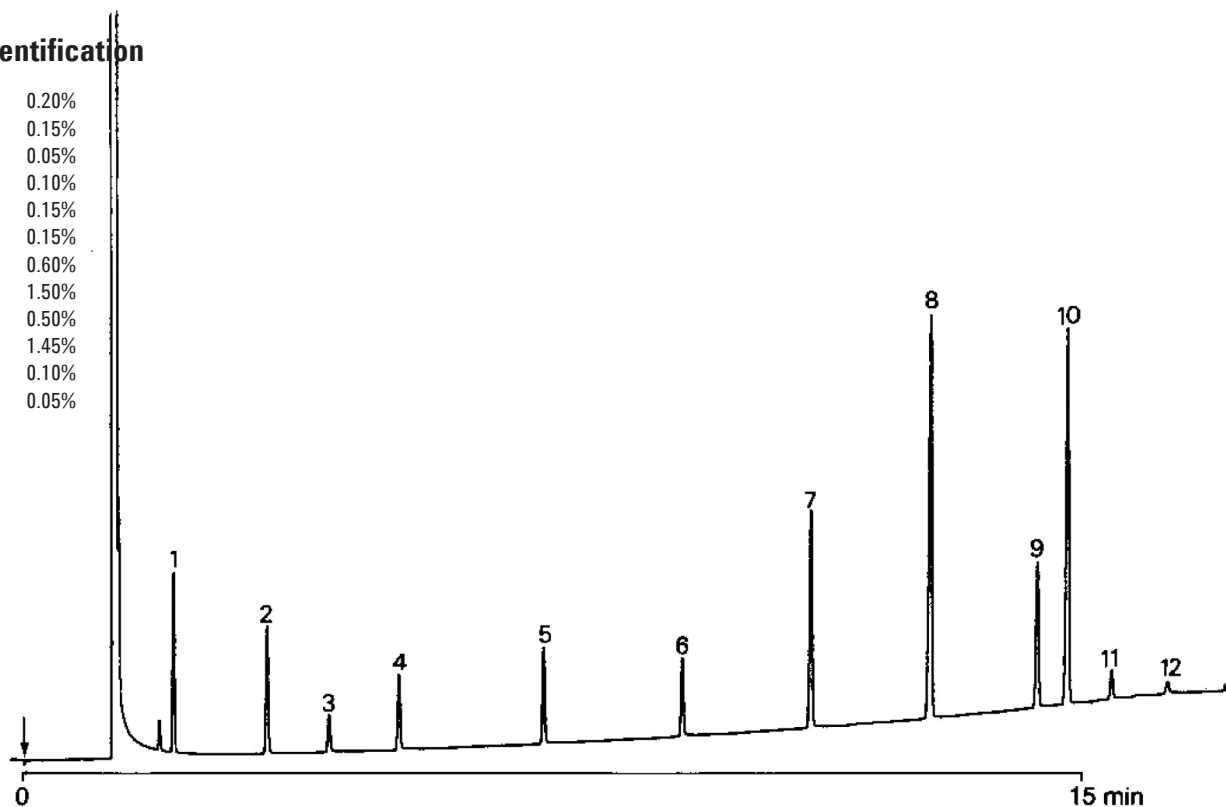
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Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 88 CB, 0.22 mm x 50 m fused silica
WCOT CP-Sil 88 CB (0.2 µm) (Part no. CP7488)
Temperature : 60 °C → 220 °C, 10 °C/min
Carrier Gas : He, 50 kPa (0.5 bar, 7.3 psi), 14 cm/s
Injector : Splitter, 100 mL/min
T = 250 °C
Detector : FID, 4 x 10⁻¹⁰ Afs
T = 250 °C
Sample Size : 0.1 µL
Solvent Sample : n-hexane

Peak identification

| | |
|-----------|-------|
| 1. C4:0 | 0.20% |
| 2. C6:0 | 0.15% |
| 3. C7:0 | 0.05% |
| 4. C8:0 | 0.10% |
| 5. C10:0 | 0.15% |
| 6. C12:0 | 0.15% |
| 7. C14:0 | 0.60% |
| 8. C16:0 | 1.50% |
| 9. C18:0 | 0.50% |
| 10. C18:1 | 1.45% |
| 11. C18:2 | 0.10% |
| 12. C18:3 | 0.05% |



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This information is subject to change without notice.

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Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A00080



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