



# FAME of fish oil

## Application Note

Food Testing & Agriculture

### Authors

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### Introduction

GC analysis of 23 FAMES in fish oil is achieved in 15 minutes, using the Agilent VF-23ms GC column.



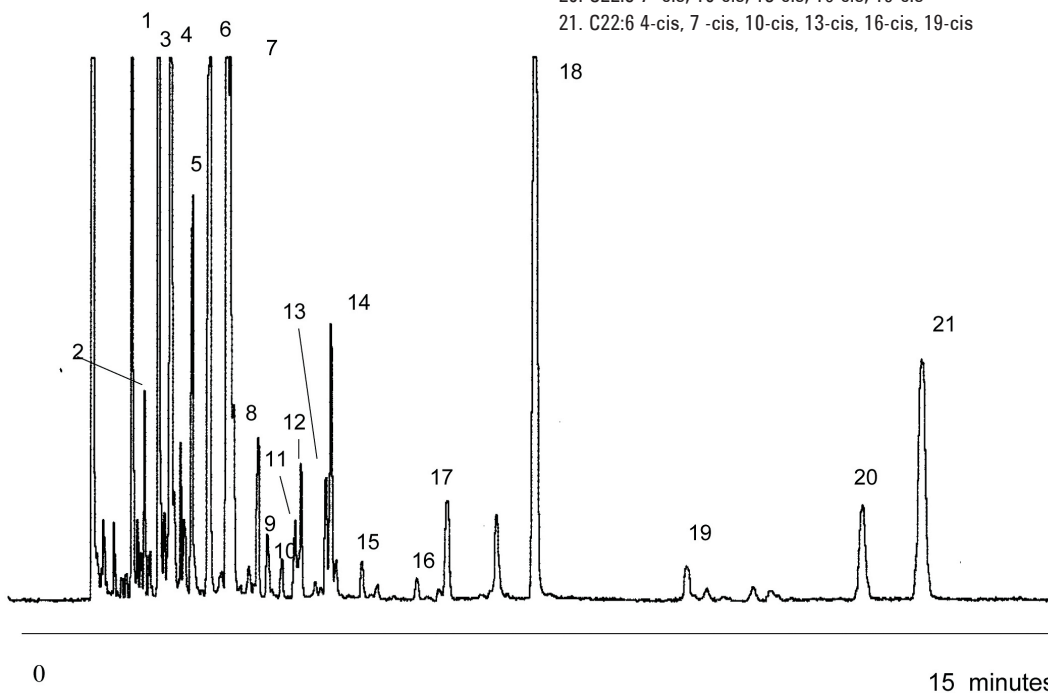
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## Conditions

Technique : GC  
Column : Agilent VF-23ms, 0.25 mm x 30 m fused silica  
(df = 0.25 µm) (Part no. CP8822)  
Temperature : 185 °C  
Carrier Gas : Hydrogen, 70 kPa  
Injector : Split, 1:100  
T = 275 °C  
Detector : FID  
Sample Size : 0.5 µL  
Concentration Range : ca. 5 ng per component on the column  
Courtesy : J. Peene, Agilent R&D laboratories, Middelburg,  
The Netherlands

## Peak identification

1. C14:0
2. C14:1
3. C16:0
4. C16:1 9-cis
5. C17:0
6. C18:0
7. C18:1 9-cis
8. C18:2 9-cis, 12-cis
9. C18:3 9-trans, 12-trans, 15-trans
10. C18:3 9-trans, 12-cis, 15-trans
11. C18:3 9-cis, 12-trans, 15-cis
12. C18:3 9-trans, 12-trans
13. C20:3 9-cis, 12-trans
14. C18:4 6-cis,9-cis,12-cis,15-cis
15. C20:2 11-cis, 14-cis
16. C20:3 8-cis, 11-cis, 14-cis
17. C20:4 5-cis, 8-cis, 11-cis, 14-cis
18. C20:5 5-cis, 8-cis, 11-cis, 14-cis, 17 -cis
19. C24:0
20. C22:5 7 -cis, 10-cis, 13-cis, 16-cis, 19-cis
21. C22:6 4-cis, 7 -cis, 10-cis, 13-cis, 16-cis, 19-cis



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Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A01971



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