Triglycerides, C_{48} – C_{54}
Analysis of cottonseed oil

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-TAP CB for Glycerides column separates 11 C_{48} to C_{54} triglycerides in cottonseed oil.

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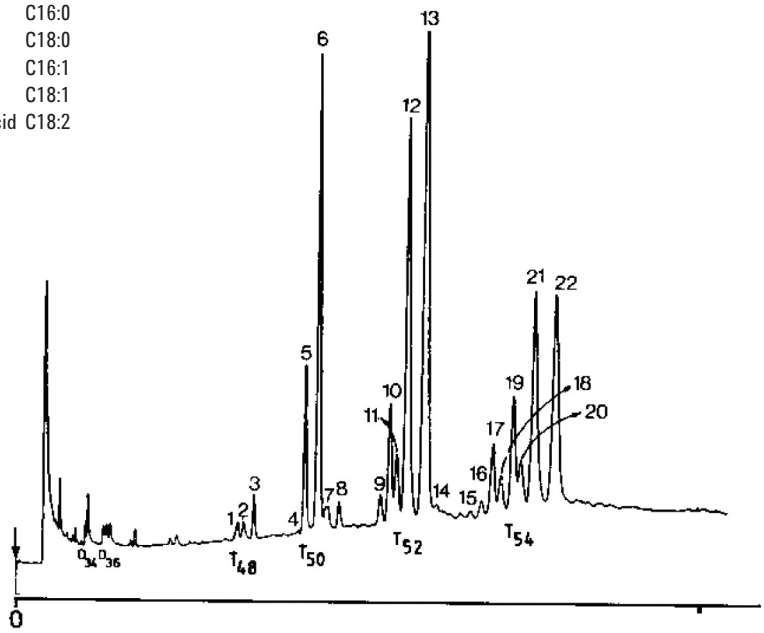
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-TAP CB, 0.25 mm x 25 m WCOT fused silica WCOT with TAP (0.10 µm) (Part no. CP7483)
Temperature	:	330 °C (1 min) ⟶ 344 °C (1 °C/min)
Carrier Gas	:	H_2, 100 kPa (1 bar, 15 psi)
Injector	:	On-column
Injection	:	0.2 µL of 0.05% cottonseed oil in hexane
Detector	:	FID

Peak identification

1. PPP	M	:	myristic acid, tetradecanoic acid	C14:0
2. MOP	P	:	palmitic acid, hexadecanoic acid	C16:0
3. MLP	S	:	stearic acid, octadecanoic acid	C18:0
4. PPS	Po	:	palmitoleic acid, cis-9-hexadecenoic acid	C16:1
5. POP	O	:	oleic acid, cis-9-octadecenoic acid	C18:1
6. PLP	L	:	linoleic acid, cis,cis-9,12-octadecadienoic acid	C18:2
7. MLO + PLPo				
8. MLL				
9. POS				
10. POO				
11. PLS				
12. PLO				
13. PLL				
14. PoLL				
15. SOS				
16. SOO				
17. OOO				
18. SLO				
19. OLO				
20. SLL				
21. OLL				
22. LLL				



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