



# Triglycerides

## Analysis of soya bean oil

### Application Note

Food Testing & Agriculture

#### Authors

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#### Introduction

Gas chromatography with an Agilent CP-TAP CB for Glycerides column separates 17 triglycerides in soya bean oil in 17 minutes.



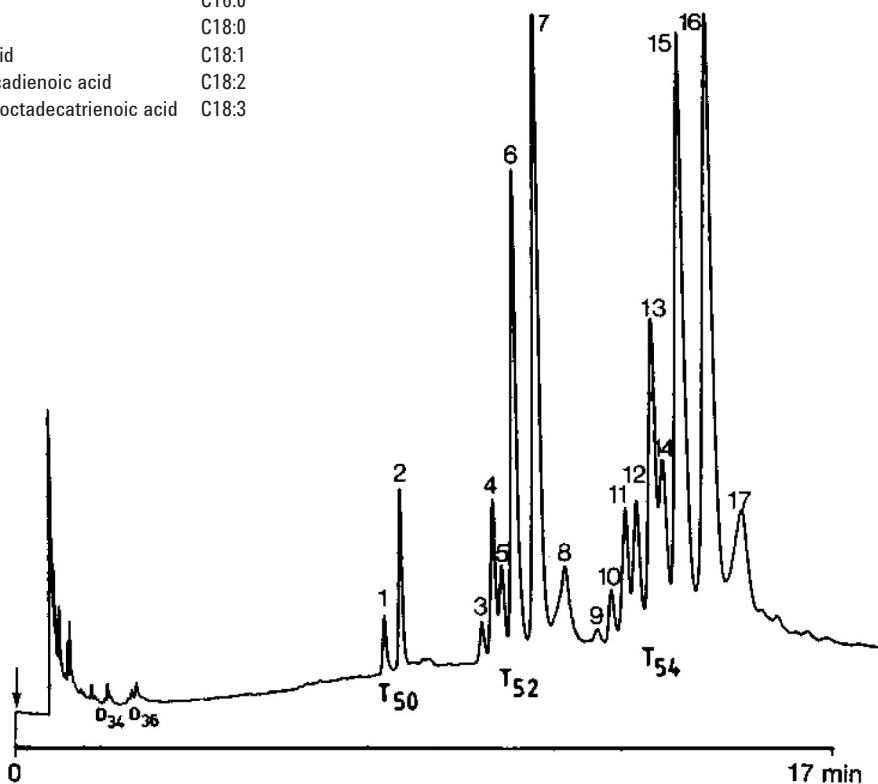
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## Conditions

Technique : GC-capillary  
Column : Agilent CP-TAP CB, 0.25 mm x 25 m WCOT fused silica with TAP (0.10 µm) (Part no. CP7483)  
Temperature : 330 °C (1 min) → 344 °C, 1 °C/min  
Carrier Gas : H<sub>2</sub>, 100 kPa (1 bar, 15 psi)  
Injector : On-column  
Injection : 0.2 µL of 0.05% soy oil in hexane  
Detector : FID

## Peak identification

1. POP	P : palmitic acid, hexadecanoic acid	C16:0
2. PLP	S : stearic acid, octadecanoic acid	C18:0
3. POS	O : oleic acid, cis-9-octadecenoic acid	C18:1
4. POO	L : linoleic acid, cis,cis-9,12-octadecadienoic acid	C18:2
5. PLS	Ln : linolenic acid, cis,cis,cis-9,12,15-octadecatrienoic acid	C18:3
6. PLO		
7. PLL		
8. PLLn		
9. SOS		
10. SOO		
11. OOO + SLS		
12. SLO		
13. OOL		
14. SLL		
15. OLL		
16. LLL		
17. LLLn		



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