Triglycerides

Analysis of butter fat

Application Note

Food Testing & Agriculture

Authors

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Introduction

Gas chromatography with an Agilent CP-TAP CB for Glycerides column separates 11 components in butter fat in 29 minutes.

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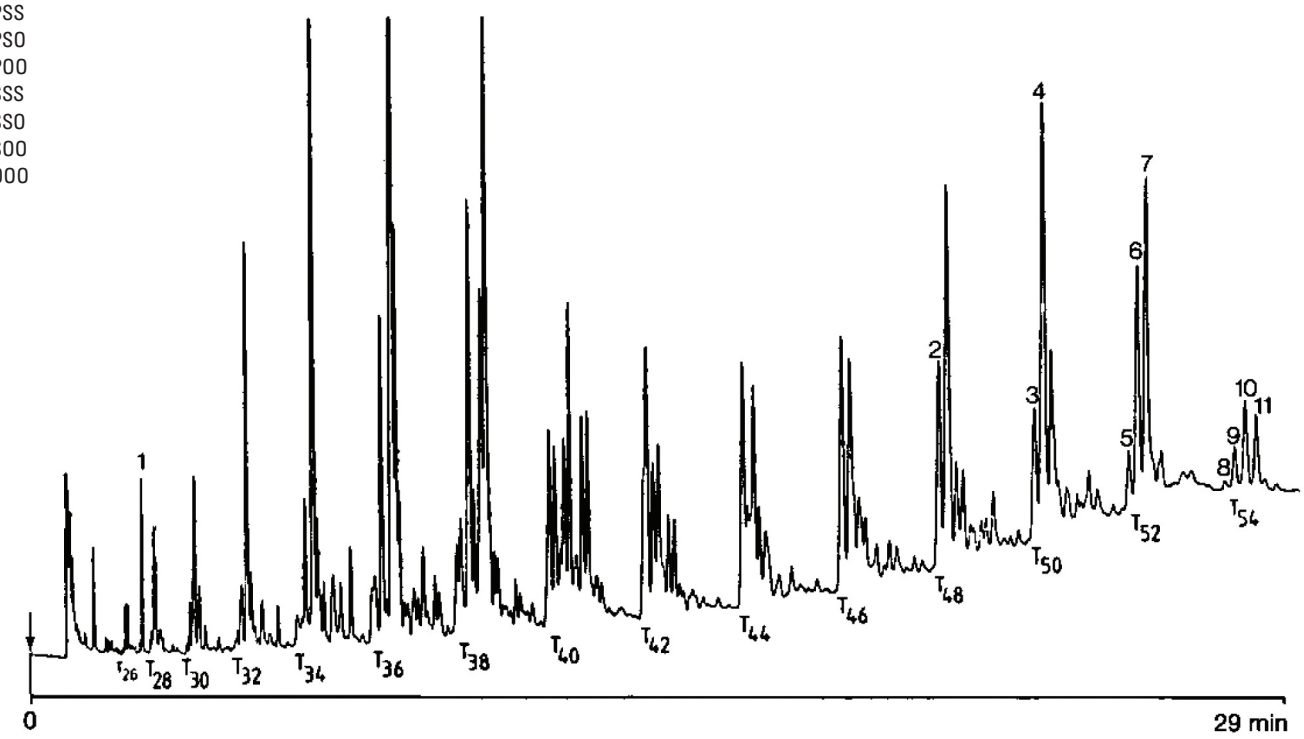
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-TAP CB, 0.25 mm x 25 m WCOT fused silica coated with TAP (0.10 µm) (Part no. CP7483)
Temperature	:	280 °C (1 min) ⟶ 355 °C, 3 °C/min
Carrier Gas	:	H_2, 100 kPa (1 bar, 15 psi)
Injector	:	On-column
Injection	:	0.2 µL of 0.05% butter fat in hexane
Detector	:	FID

Peak identification

1. cholesterol
2. PPP
3. PPS
4. PPO
5. PSS
6. PSO
7. POO
8. SSS
9. SSO
10. SOO
11. OOO

P : palmitic acid, hexadecanoic acid C16:0
S : stearic acid, octadecanoic acid C18:0
O : oleic acid, cis-9-octadecenoic acid C18:1



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