

Flavors and aromas

Analysis of natto (fermented soy beans)

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Wax 58 FFAP CB column separates 19 components in a sample of natto (fermented soy beans) in 35 minutes.



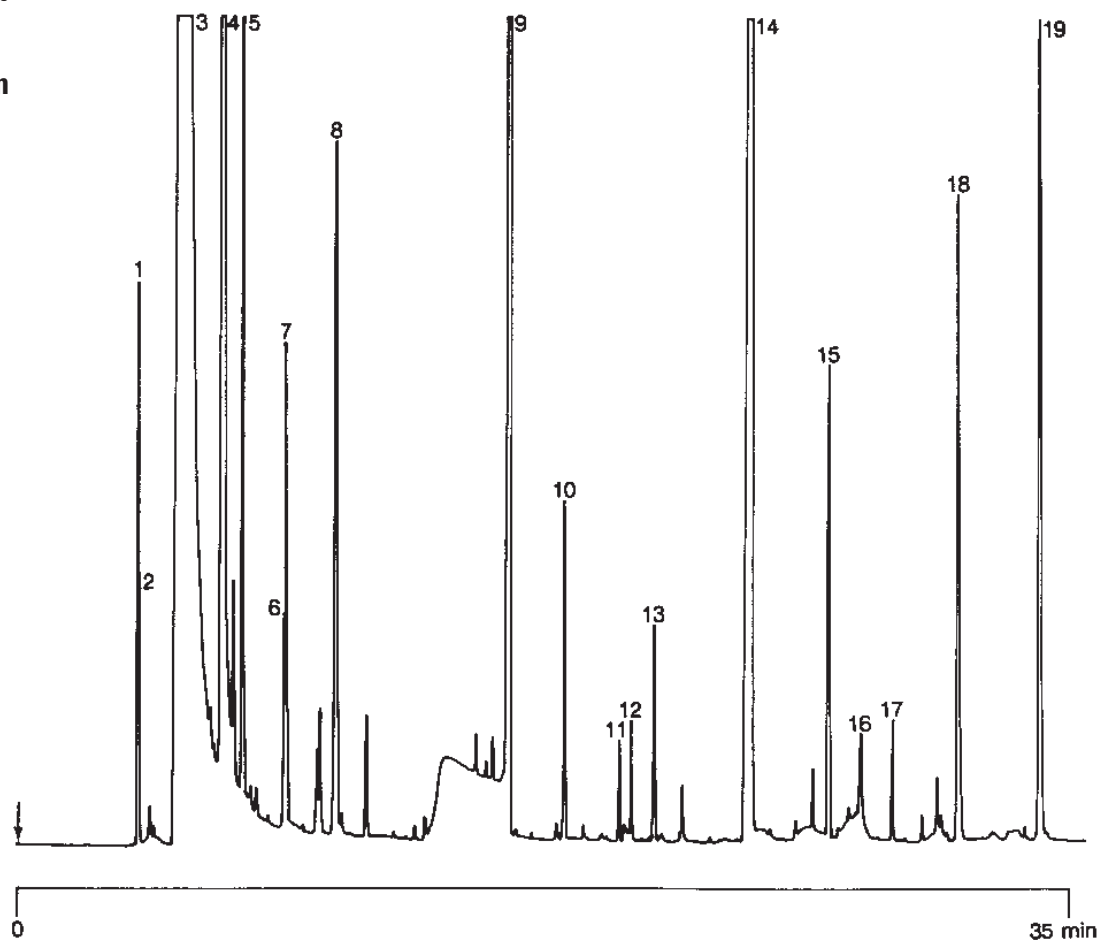
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Conditions

Technique : GC-TCT
Column : Agilent CP-Wax 58 CB, 0.25 mm x 50 m fused silica
WCOT CP-Wax 58 CB (df = 0.2 µm)
(Part no. CP7726)
Temperature : 50 °C (10 min) → 220 °C, 5 °C/min
Carrier Gas : TCT, trap tube Tenax TA,
T = 210 °C
Detector : FID, 64 x 10⁻¹¹ Afs
Sample Size : 15 g

Peak identification

1. hexane
2. 3-methylpentane
3. acetone
4. 2-butanone
5. 3-methyl-2-butanone
6. 2,3-butanedione
7. 2-pentanone
8. 3-methyl-2-pentanone
9. acetoin
10. 2-heptanone
11. pyrazine
12. 6-methyl-2-heptanone
13. 5-methyl-2-heptanone
14. 2,5-dimethylpyrazine
15. trimethylpyrazine
16. acetic acid
17. propanoic acid
18. iso-butanoic acid
19. 2-methylbutanoic acid +
iso-pentanoic acid ?



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This information is subject to change without notice.

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