



Amines, C₄ – C₁₄

Analysis of monoalkylamines

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Sil 8 CB for Amines column separates 14 monoalkylamines in 45 minutes.



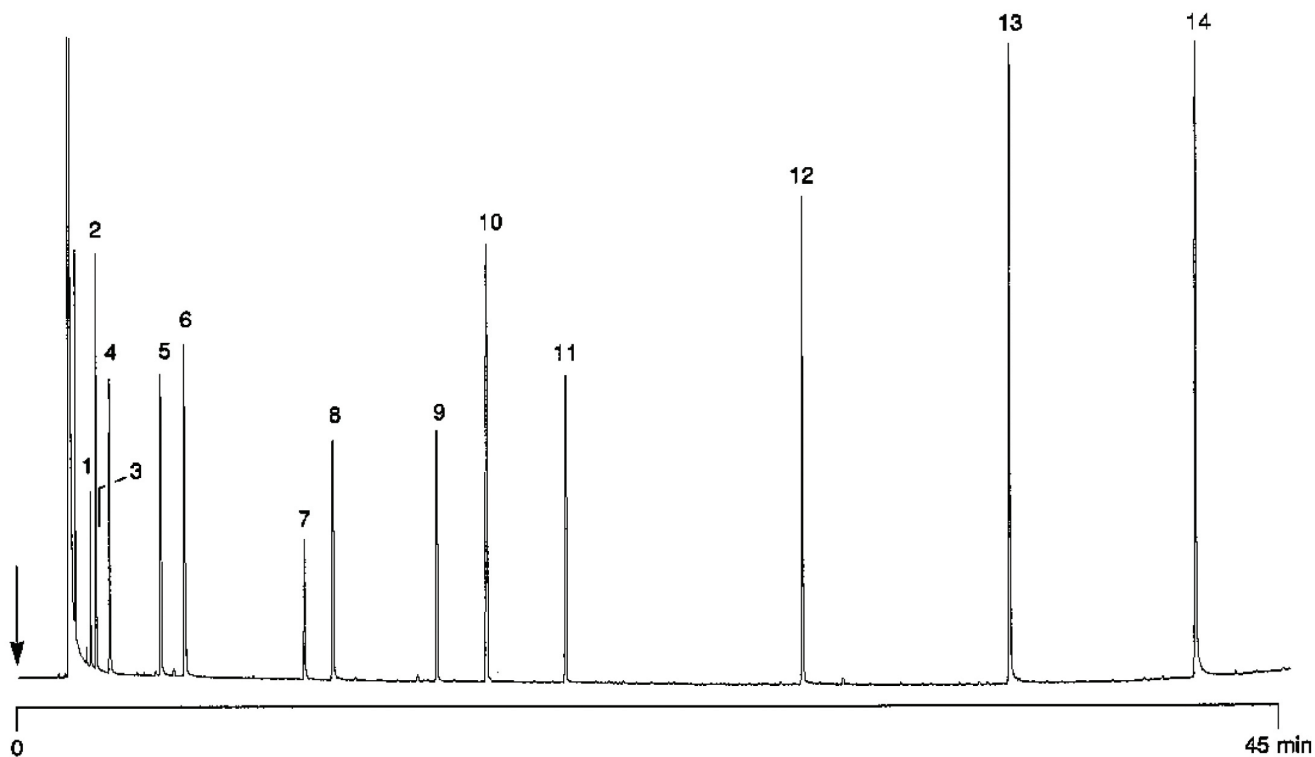
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Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 8 CB for Amines fused silica,
0.25 mm x 30 m WCOT (df = 0.5 µm)
(Part no. CP7595)
Temperature : 50 °C (5 min) - 220 °C, 4 °C/min
Carrier Gas : H₂, 60 kPa (0.6 bar, 8.6 psi)
Injector : Split, 100 mL/min
T = 200 °C
Detector : ECD
T = 285 °C
Sample Size : 1 µL
Concentration Range : 10 - 30 ng

Peak identification

1. t-butylamine
2. sec-butylamine
3. isobutylamine
4. n-butylamine
5. isopentylamine
6. n-pentylamine
7. n-hexylamine
8. cyclohexylamine
9. n-heptylamine
10. dimethylcyclohexylamine
11. n-octylamine
12. n-decylamine
13. n-dodecylamine
14. n-tetradecylamine



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