

Amines, C₄ – C₁₂

Application Note

Materials Testing & Research

Authors

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Introduction

Gas chromatography with an Agilent CP-Sil 8 CB for Amines column separates 14 amines in 40 minutes to demonstrate the linearity of amine elution.



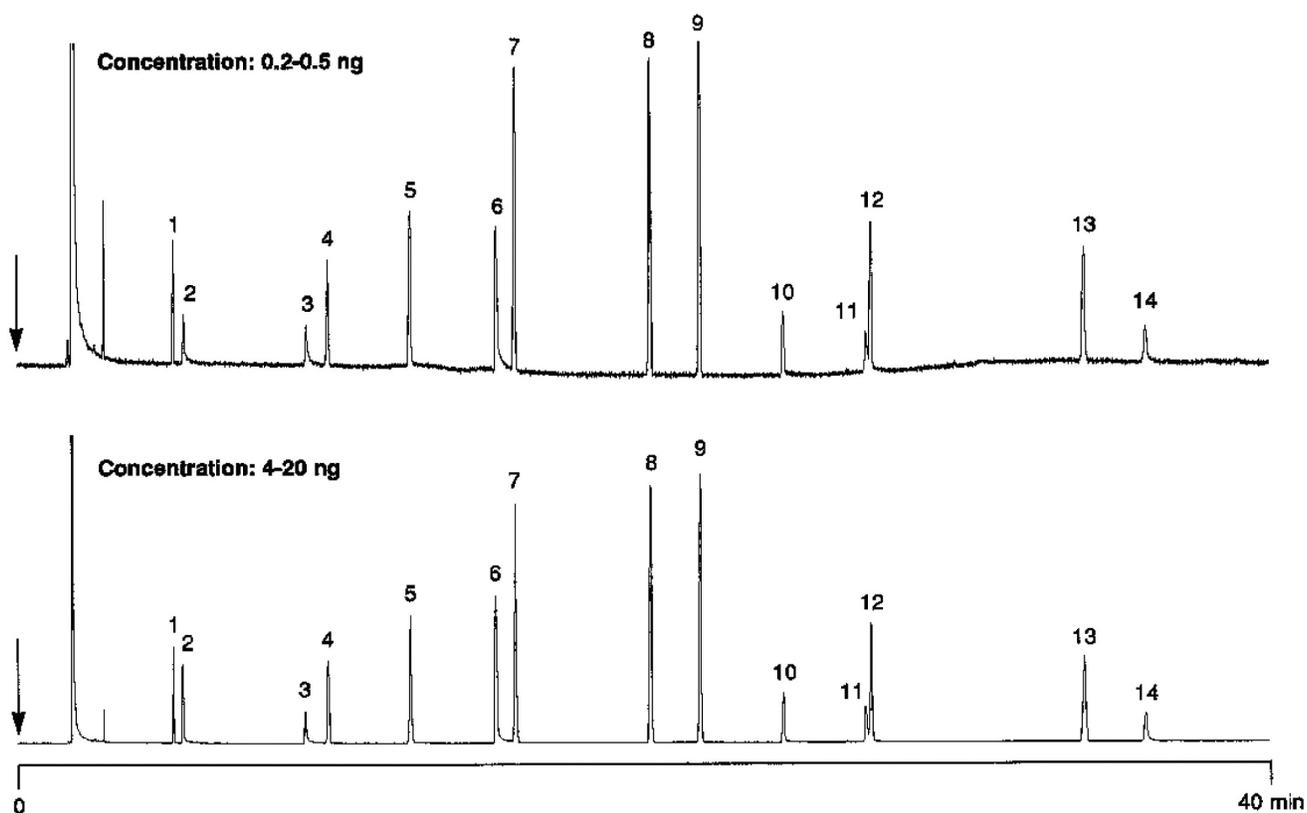
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Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 8 CB for Amines fused silica, 0.25 mm x 30 m WCOT (df = 0.51 μ m) (Part no. CP7595)
Temperature : 90 °C (10 min) \rightarrow 150 °C, 3 °C/min
Carrier Gas : H₂, 60 kPa (0.6 bar, 8.6 psi)
Injector : Split, 100 mL/min
T = 200 °C
Detector : FID
T = 300 °C
Sample Size : 1 μ L
Concentration Range : see chromatogram

Peak identification

1. cyclohexylamine
2. 1,4-diaminobutane
3. 1,5-diaminopentane
4. n-decane
5. n-octylamine
6. 1,6-diaminohexane
7. n-undecane
8. 2,6-dimethylaniline
9. n-dodecane
10. n-decylamine
11. 1,8-diaminooctane
12. n-tridecane
13. dicyclohexylamine
14. n-dodecylamine



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Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A01275



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