Amines, C_1 – C_6

Analysis of volatile amines

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent PoraPLOT for amines column separates ten volatile amines in ten minutes.

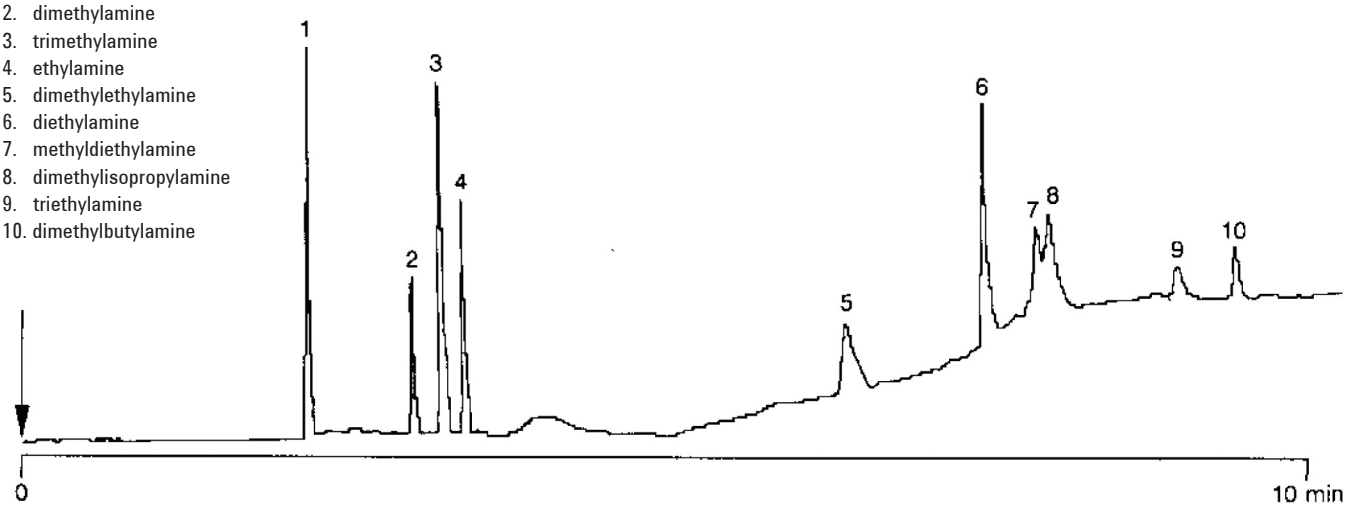
Agilent Technologies

Conditions

Technique	:	GC-capillary
Column	:	Agilent PoraPLOT for amines, 0.32 mm x 25 m fused silica PLOT PoraPLOT (df = 10 µm) (Part no. CP7591)
Temperature	:	130 °C (5 min) ⟶ 220 °C, 30 °C/min
Carrier Gas	:	He, 200 kPa (2 bar, 28 psi)
Injector	:	Splitter, 1:20 T = 200 °C
Detector	:	PND, T = 260 °C
Sample Size	:	2.0 µL
Concentration Range	:	1 mg/L
Solvent Sample	:	water
Courtesy	:	H. Langschmidt, Institut Fresenius, Dortmund, Germany

Peak identification

1. methylamine
2. dimethylamine
3. trimethylamine
4. ethylamine
5. dimethylethylamine
6. diethylamine
7. methyldiethylamine
8. dimethylisopropylamine
9. triethylamine
10. dimethylbutylamine



www.agilent.com/chem

Printed in the USA
31 October, 2011
First published prior to 11 May, 2010
A00898

Agilent Technologies