

## **C<sub>1</sub> – C<sub>3</sub> amines**

### **Application Note**

Environmental

#### **Authors**

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#### **Introduction**

Agilent CP-Volamine elutes volatile amines as symmetrical peaks. Besides the volatile amines, the CP-Volamine also elutes low levels of alcohols that are often seen as by-products.

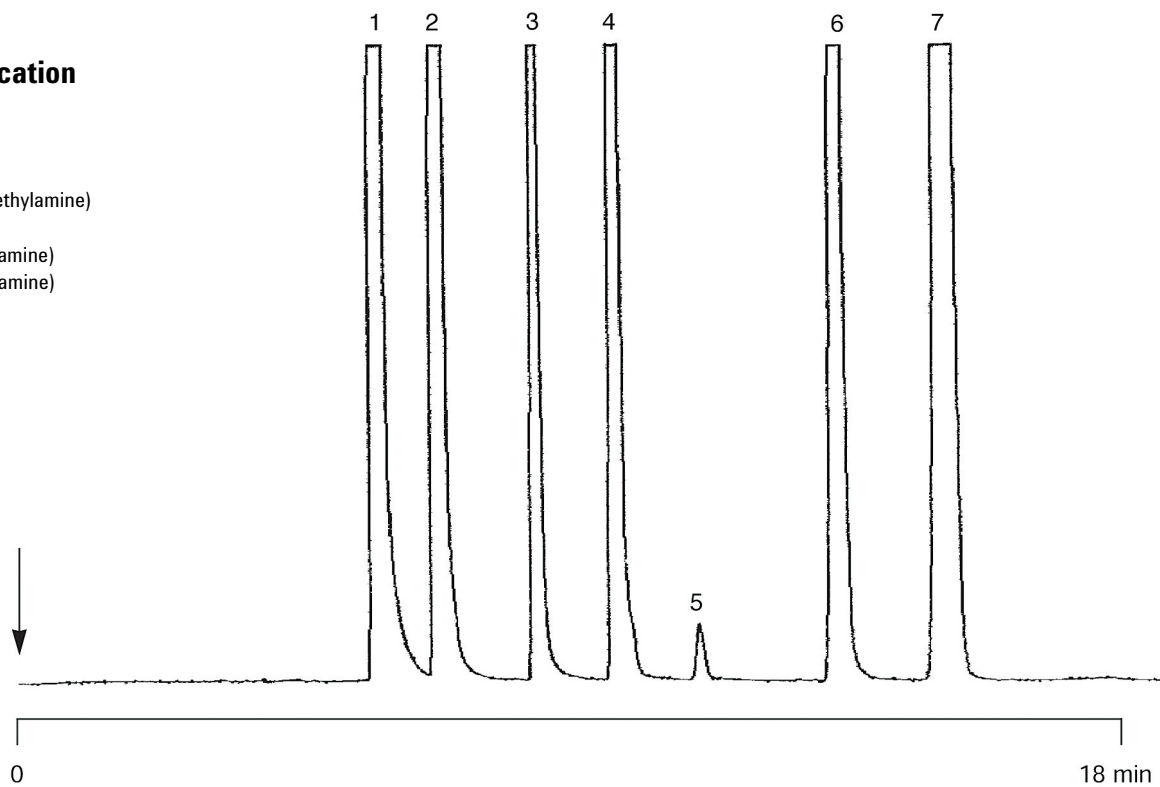
In addition, water and ammonia elute as sharp peaks. CP-Volamine can withstand aqueous injections of amine mixtures and is therefore one of the best solutions for amine analysis.

## Conditions

Technique : GC-capillary  
Column : Agilent CP-Volamine, 0.32 mm x 60 m fused silica WCOT (Part no. CP7448)  
Temperature : 40 °C (10 min) → 100 °C, 15 °C/min  
Carrier Gas : He, 100 kPa (1 bar, 14 psi)  
Injector : Split. 1:50,  
T = 180 °C  
Detector : TCD,  
T = 250 °C  
Sample Size : 1.0 µL, liquid  
Concentration Range : % levels  
  
Courtesy : Dr. F. de Boever, UCB research centre Drogenbos,  
Dr. G. Baele, UCB Gent,  
Belgium

## Peak identification

1. air
2. NH<sub>3</sub> (ammonia)
3. water
4. MMA (mono-methylamine)
5. methanol
6. DMA (di-methylamine)
7. TMA (tri-methylamine)



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