



## **Amines**

# Analysis of impurities in ethylene diamine

## Application Note

Materials Testing & Research

### **Authors**

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### **Introduction**

For the trace analysis of amines a basic deactivated capillary is needed to elute amines as a sharp peak. The non-polar Agilent CP-Sil 8 CB for Amines provides this, combined with a unique selectivity. The water peak elutes, therefore, almost without retention.



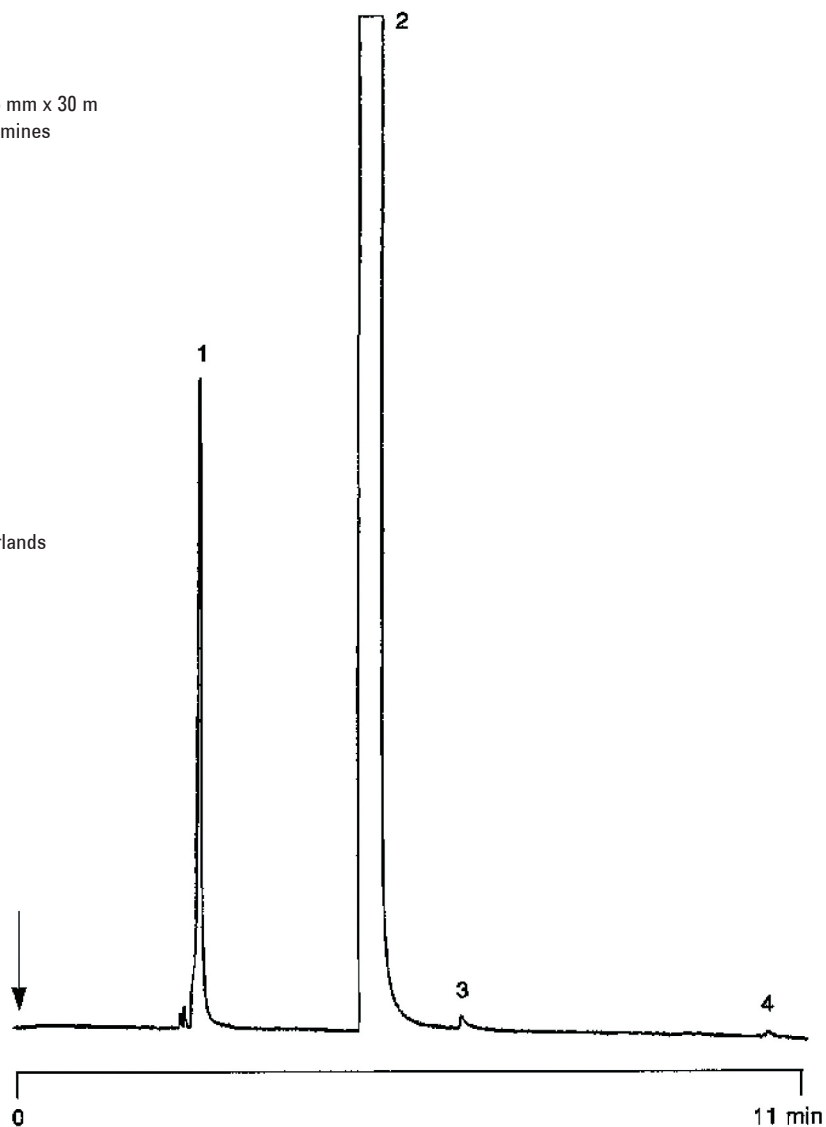
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## Conditions

Technique : GC-capillary  
Column : Agilent CP-Sil 8 CB for Amines, 0.25 mm x 30 m  
fused silica WCOT CP-Sil 8 CB for Amines  
(df = 0.5  $\mu$ m) (Part no. CP7595)  
Temperature : 50 °C  $\rightarrow$  86 °C, 4 °C/min;  
86 °C  $\rightarrow$  246 °C, 10 °C/min  
Carrier Gas : He, 62 kPa (0.82 bar, 11.8 psi)  
Injector : Split,  
T = 150 °C  
Detector : TCD  
T = 250 °C  
Sample Size : 1  $\mu$ L  
Concentration Range : impurities at ca. 100 ppm level  
Courtesy : J. Verboon, Elf Atochem, the Netherlands

## Peak identification

1. water
2. ethylene diamine (diaminoethane)
3. impurity



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This information is subject to change without notice.

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