



Gases

Headspace analysis of cyanides in blood

Application Note

Forensics & Drug Testing

Authors

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Introduction

Blood samples of 500 μL are spiked with acetonitrile (internal standard) and with 100 μL phosphoric acid. After homogenization they are heated in a closed vial at 60 $^{\circ}\text{C}$ for 30 minutes. A 250 μL headspace sample is injected and analyzed.

The Agilent PoraBOND Q column gives an excellent separation, peakshape and quantitative results.



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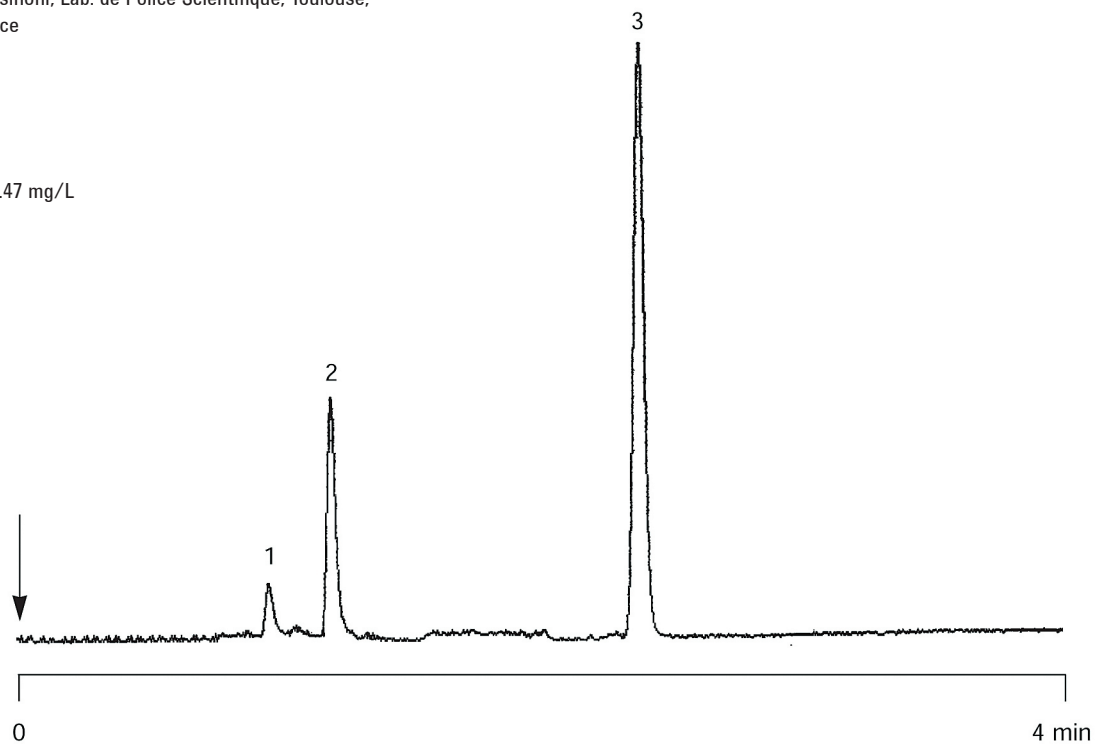
Conditions

Technique : GC-wide-bore
Column : Agilent PoraBOND Q, 0.53 mm x 25 m (df = 10 μ m)
(Part no. CP7354)
Temperature : 120 °C
Carrier Gas : He, 40 kPa
Injector : headspace/split, 200 °C
Detector : NPD, 230 °C
Sample Size : 250 μ L headspace
Concentration Range : 20 - 4800 ng/mL
Sample Solvent : body fluid/water

Courtesy : P. Visinoni, Lab. de Police Scientifique, Toulouse,
France

Peak identification

1. nitrogen (air)
2. hydrocyanic acid (HCN) 0.47 mg/L
3. acetonitrile (IS) 1.0 mg/L



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For Forensic Use.

This information is subject to change without notice.

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