

# Sulfur compounds

## Analysis of ethanethiol (ethyl mercaptan) in LPG

### Application Note

Energy & Fuels

#### Authors

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#### Introduction

The high retention and excellent inertness of the Agilent CP-SilicaPLOT column allows the separation and detection of sulfur compounds in hydrocarbon matrices at low ppm levels.



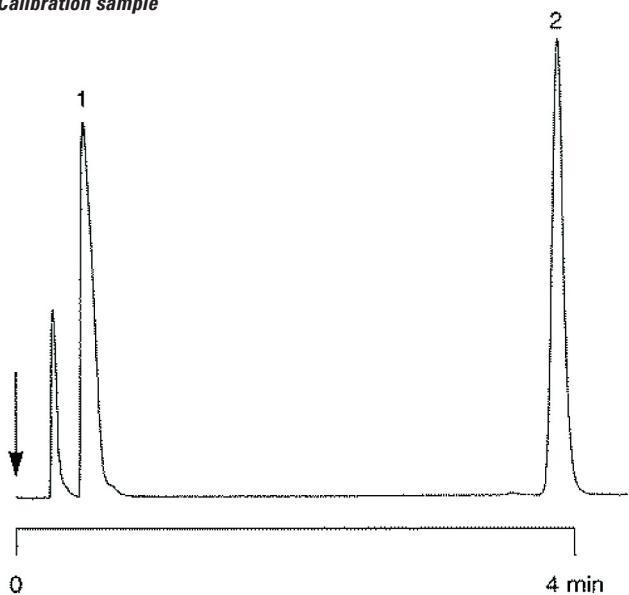
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## Conditions

Technique : GC-wide-bore  
Column : Agilent CP-SilicaPLOT, 0.53 mm x 30 m fused silica PLOT (df = 6  $\mu$ m) (Part no. CP8570)  
Temperature : 120 °C  
Carrier Gas : He, 175 kPa (1.75 bar, 25 psi)  
Injector : Valve loop (nickel) injection,  
T = 120 °C  
Detector : FPD  
T = 175 °C  
Concentration Range : 10 - 20 ppm  
Solvent Sample : propane/LPG

Courtesy : M. Olofsson, Borealis AB, Stenungsund, Sweden

*Calibration sample*



## Peak identification

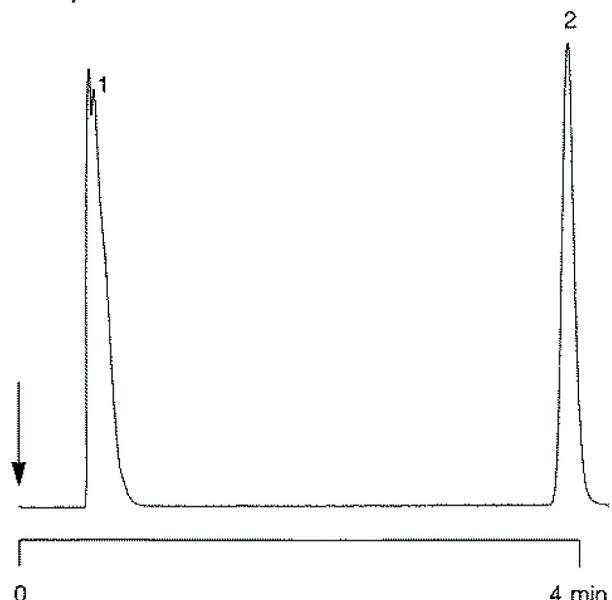
Chromatogram 1 : Calibration sample

1. propane (bulk)
2. ethanethiol (ethyl mercaptan), 10.3 ppm

Chromatogram 2: LPG sample

1. LPG (bulk)
2. ethanethiol (ethyl mercaptan), 17 ppm

*LPG sample*



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This information is subject to change without notice.

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