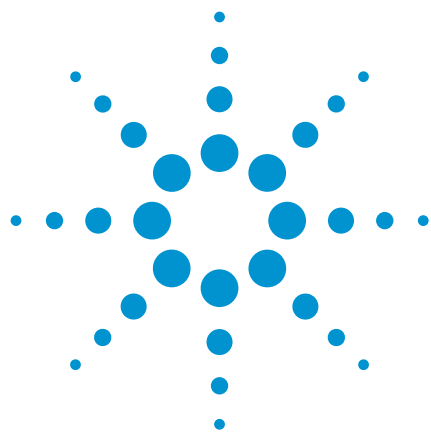




Glycols

Analysis of impurity ethyleneglycol in 1,2-propyleneglycol

Application Note

Materials Testing & Research

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography using an Agilent CP-Sil 5 CB column identifies ethylene glycol impurity in 1,2-propyleneglycol in 17 minutes.



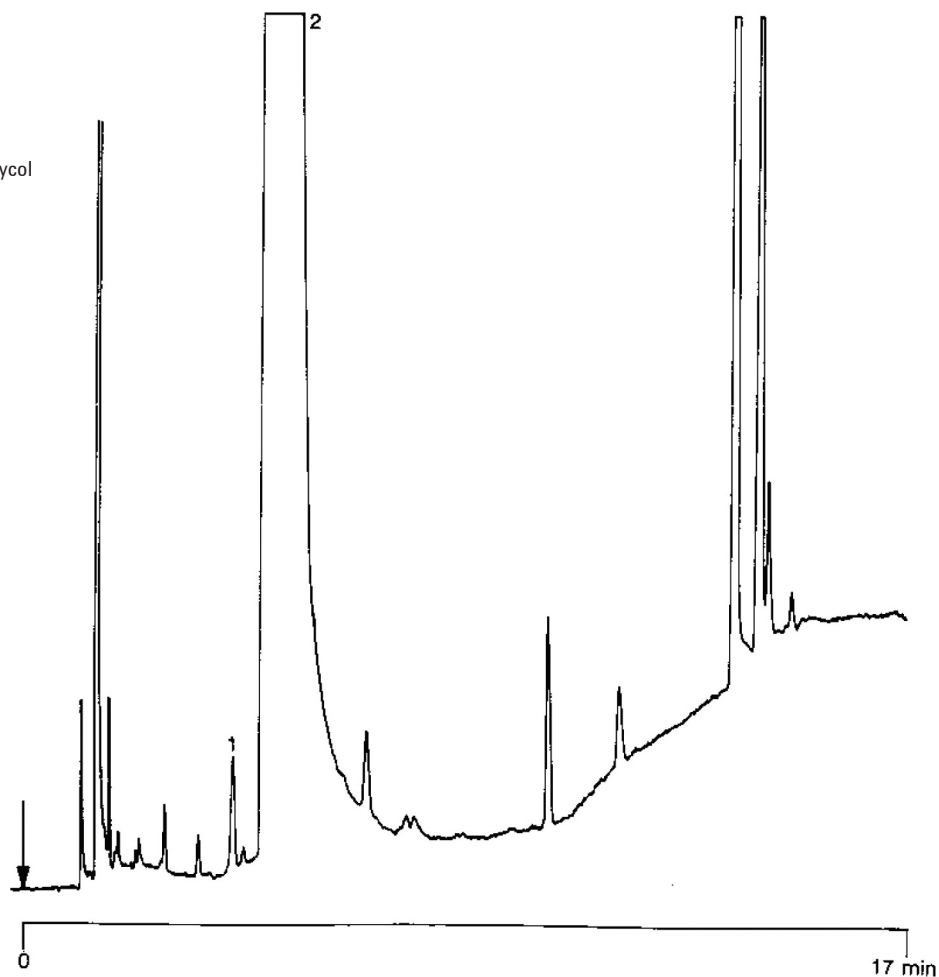
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Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 5 CB, 0.32 mm x 25 m fused silica
WCOT CP-Sil 5 CB (df = 5.0 μ m) (Part no. CP7680)
Temperature : 100 °C (7 min) $\rightarrow$ 175 °C, 7 °C/min
Carrier Gas : H₂, 40 kPa (0.4 bar, 5.7 psi)
Injector : Splitter, 1:75
T = 275 °C
Detector : FID, atten. 2²
T = 300 °C
Sample Size : 1 μ L
Concentration Range : = 100 ppm ethylene glycol
Solvent Sample : pure propylene glycol

Peak identification

1. ethylene glycol
2. 1,2-propylene glycol



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This information is subject to change without notice.

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