Epoxides
Separation of epoxides on a wide bore capillary column

Application Note

Materials Testing & Research

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Introduction
Gas chromatography with an Agilent CP-Sil 5 CB column separates three epoxides in two minutes.
Conditions

Technique: GC-capillary
Column: Agilent CP-Sil 5 CB, 0.53 mm x 10 m fused silica WCOT CP-Sil 5 CB (5.0 µm) (Part no. CP765)
Temperature: 50 °C → 250 °C, 10 °C/min
Carrier Gas: N₂, 10 kPa (0.1 bar, 1.5 psi) 50 cm/s
Injector: Direct
T = 250 °C
Detector: FID, 100 x 10⁻¹² Afs
T = 275 °C
Sample Size: 0.2 µL
Solvent Sample: tetrachloroethene

Peak identification

1. propylene oxide
2. methylal
3. butylene oxide
4. tetrachloroethene