Aromatic hydrocarbons, C₆ – C₈
Analysis of impurities in p-xylene

Application Note

Materials Testing & Research

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Introduction
Gas chromatography with an Agilent CP-Wax 52 CB column detects five impurities in p-xylene in 20 minutes.
Conditions

Technique: GC-capillary

Column: Agilent CP-Wax 52 CB, 0.32 mm x 50 m fused silica WCOT (df = 1.2 μm) (Part no. CP7773)

Temperature: 55 °C → 150 °C, 4 °C/min

Carrier Gas: H₂, 65 kPa (65 bar, 9.3 psi)

Injector: Split

Detection: FID, 8 x 10⁻¹² Afs

Sample Size: 0.05 μL

Peak identification

1. benzene < 0.005%
2. toluene 0.094%
3. ethylbenzene 0.058%
4. p-xylene > 99%
5. m-xylene 0.403%
6. o-xylene 0.058%