Phthalate esters
Analysis of phthalate esters to EPA 606

Application Note

Environmental

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Introduction
Gas chromatography with an Agilent CP-Sil 8 CB column separates six phthalate esters according to EPA 606 in 50 minutes.
Conditions

Technique: GC-capillary
Column: Agilent CP-Sil 8 CB, 0.32 mm x 50 m fused silica
              WCOT CP-Sil 8 CB (df = 0.4 μm) (Part no. CP7789)
Temperature: 100 °C → 300 °C, 10 °C/min
Carrier Gas: H₂, 150 kPa (1.5 bar, 21 psi)
Injector: Split, 100 mL/min
              T = 265 °C
Detector: FID
              T = 300 °C

Peak identification
1. dimethyl phthalate
2. diethyl phthalate
3. di-n-butyl phthalate
4. butylbenzyl phthalate
5. bis(2-ethylhexyl)phthalate
6. di-n-octyl phthalate