



## **Phthalate esters and alcohols**

Determination of dimethylphthalate and several by-products on a wide-bore fused silica column

### **Application Note**

Materials Testing & Research

#### **Authors**

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#### **Introduction**

Gas chromatography using an Agilent CP-Sil 5 CB column separates ten phthalate esters and alcohols in 13 minutes.



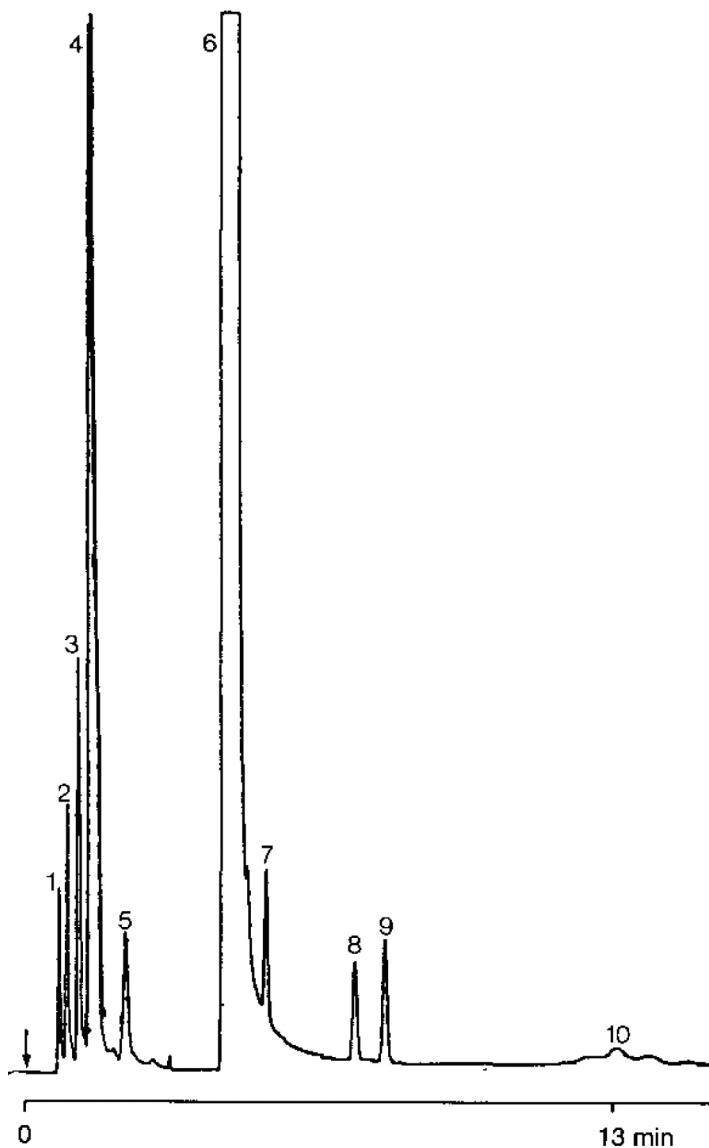
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## Conditions

Technique : GC-capillary  
Column : Agilent CP-Sil 5 CB, 0.53 mm x 10 m fused silica  
WCOT CP-Sil 5 CB (5.0  $\mu\text{m}$ ) (Part no. CP7645)  
Temperature : 150  $^{\circ}\text{C}$   $\rightarrow$  300  $^{\circ}\text{C}$ , 10  $^{\circ}\text{C}/\text{min}$   
Carrier Gas :  $\text{N}_2$ , 10 kPa (0.1 bar), 52 cm/s  
Injector : direct  
T = 250  $^{\circ}\text{C}$   
Detector : FID,  $100 \times 10^{-12}$  Afs  
T = 275  $^{\circ}\text{C}$   
Sample Size : 0.5  $\mu\text{L}$

## Peak identification

1. ethanol
2. n-butanol
3. toluene
4. dibutylethanol
5. 2-ethylhexanol
6. dimethylphthalate
7. diethylphthalate
8. diisobutylphthalate
9. disbutylphthalate
10. diisooctylphthalate



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