



## **Ketones C<sub>3</sub> – C<sub>9</sub>**

Separation of C<sub>3</sub>-C<sub>9</sub> ketones on a wide-bore fused silica column

### **Application Note**

Energy & Fuels

#### **Authors**

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#### **Introduction**

Gas chromatography using an Agilent CP-Sil 5 CB column separates 15 C<sub>3</sub> to C<sub>9</sub> ketones in ten minutes.



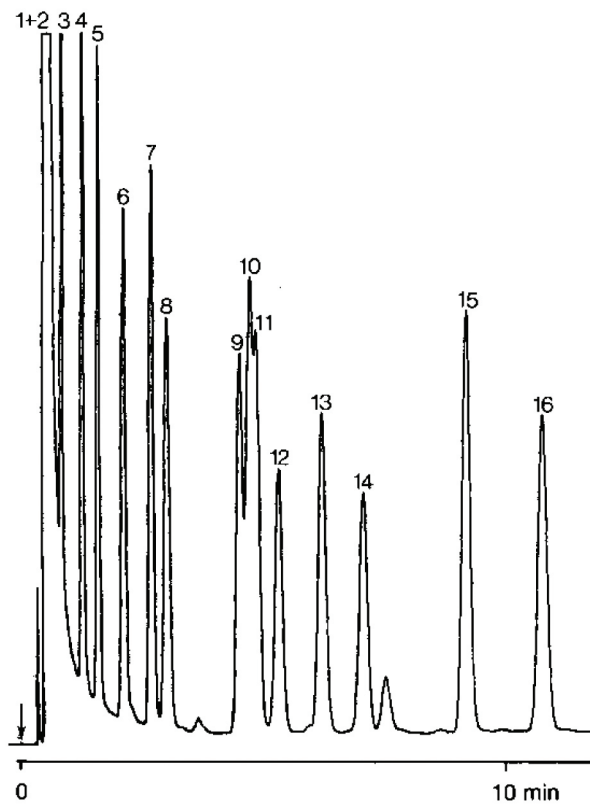
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## Conditions

Technique : GC-capillary  
Column : Agilent CP-Sil 5 CB, 0.53 mm x 10 m fused silica  
WCOT CP-Sil 5 CB (5.0  $\mu$ m) (Part no. CP7645)  
Temperature : 50 °C  $\rightarrow$  300 °C, 5 °C/min  
Carrier Gas : N<sub>2</sub>, 10 kPa (0.1 bar), 52 cm/s  
Injector : direct  
T = 250 °C  
Detector : FID, 100 x 10<sup>-12</sup> Afs  
T = 275 °C  
Sample Size : 0.2  $\mu$ L  
Solvent Sample : methanol

## Peak identification

1. methanol
2. acetone
3. butanone
4. methylisopropylketone
5. 3-pentanone
6. methylisobutylketone
7. cyclopentanone
8. diisopropylketone
9. cyclohexanone
10. pentoxone (4-methoxy-4-methylpentanone-2)
11. 2-heptanone
12. ethylamylketone
13. diisobutylketone
14. 5-nonanone
15. acetophenone
16. isophorone (3,5,5-trimethyl-2-cyclohexen-1-one)



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