



Lemon oil

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

The analysis of complex samples such as essential oils, is typically performed on 0.25 mm x 30 m columns. Using the 0.15 mm id fast Agilent FactorFour columns, the run time can be reduced by a factor of 2, while the separation is identical. The only adjustment required is the inlet pressure and the temperature program of the oven, (within easily achievable parameters). With the 0.15 mm FactorFour columns the run time for nearly all applications can be cut to 50% using existing instrumentation and... no change in separation. The 0.15 mm columns use the same ferrules as for 0.25 mm id columns due to the same outside diameter. Installation space is also identical.

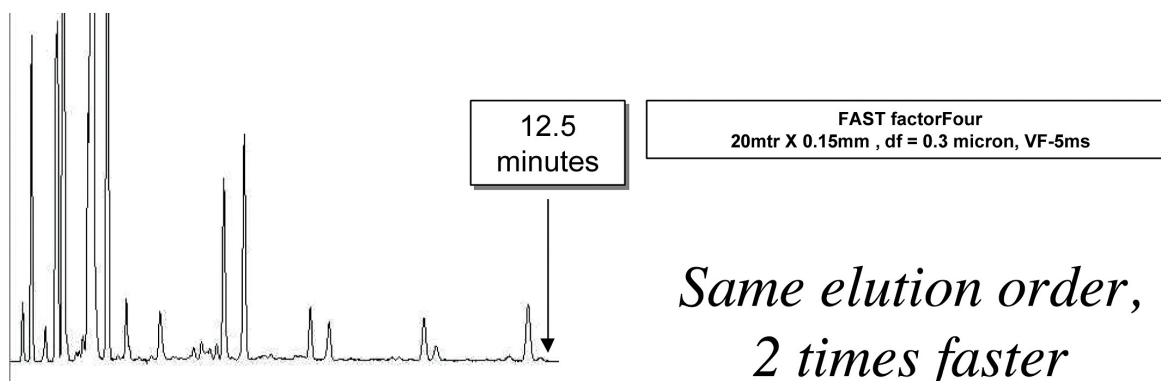
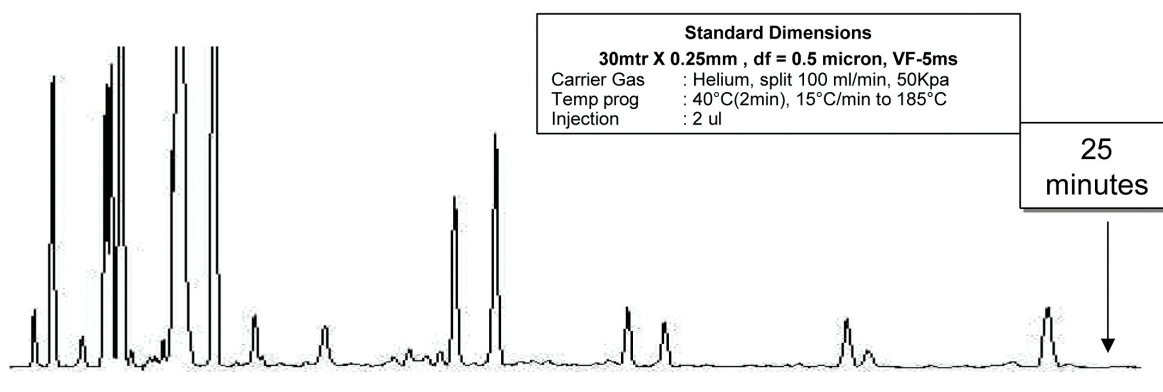
For some separations where high concentrations are to be measured, the split ratio may have to be increased.



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Conditions

Technique : GC-capillary
Column : Agilent FactorFour VF-5ms, 0.15 mm x 20 m fused silica (df = 0.3 μ m) (Part no. CP9037)
Temperature : 40 °C, 2 min with 30 °C/min to 185 °C
Carrier Gas : Helium, 160 kPa, 1.6 bar
Injector : Split, 150 mL/min,
T = 250 °C
Detector : FID
T = 300 °C
Sample : 2 μ L
Concentration : 1%



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This information is subject to change without notice.

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