



Ethylene reactor gases

Fast analysis of composition of pressurized reactor gas

Application Note

Environmental

Authors

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Introduction

Fast analysis of volatile compounds using short wide bore (0.53 mm id) fused silica and a micro-volume direct injection device. A narrow injection band is obtained allowing fast analysis. Column overloading is reduced to a minimum due to the small injected amounts. Despite this the detection limits are around 0.2 ppm.



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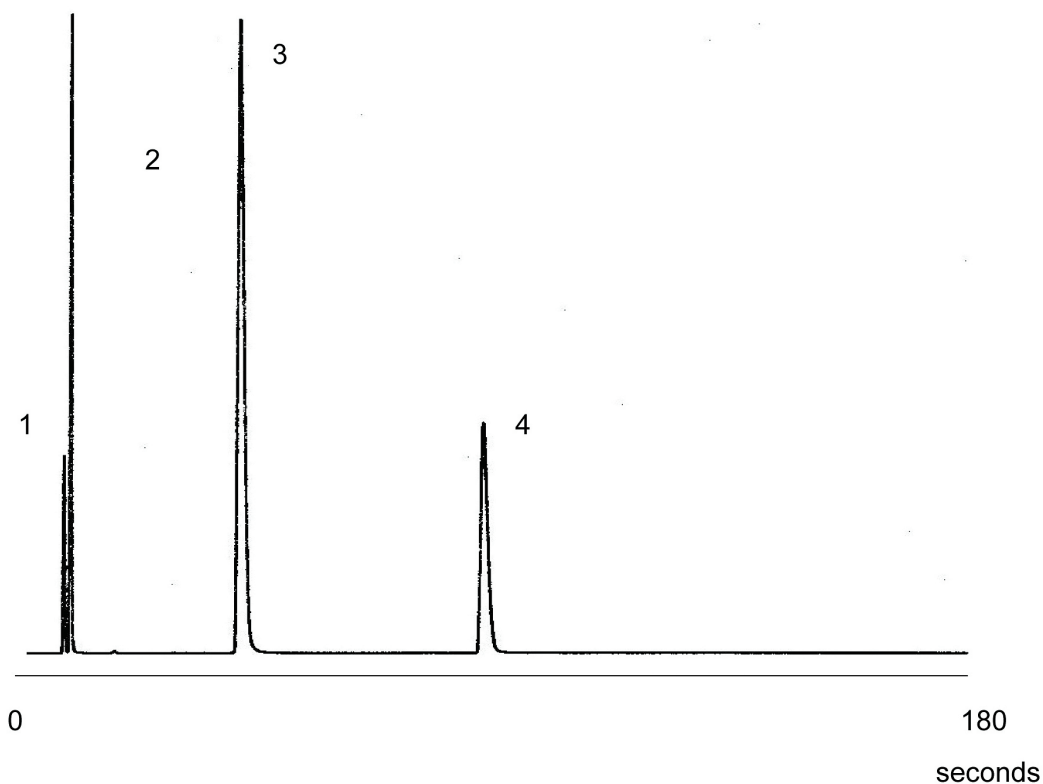
Conditions

Technique : GC
Column : Agilent PoraBOND Q PLOT, 0.53 mm x 5 m fused silica (df = 10 µm) prepared from Part no. CP7353 (Agilent PoraBOND Q, 0.53 mm x 10 m)
Temperature : 70 °C (0.3 min) → 150 °C, 70 °C/min
Carrier Gas : Helium, 85 cm/s
Injector : Valve
Detector : FID
Sample Size : 0.06 µL
Matrix : N₂, Cl₂, HCl, water hydrocarbons and chlorinated hydrocarbons, synthetic standard

Courtesy : Jim Luong and Rhonda Gras, Dow Chemical Canada

Peak identification

1. methane
2. ethylene
3. ethylchloride
4. ethylene dichloride



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This information is subject to change without notice.

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