



# Impurities in propylene

## Application Note

Energy & Fuels

### Authors

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### Introduction

The Agilent Select  $\text{Al}_2\text{O}_3$  MAPD column is extensively deactivated, which results in a high response for traces of polar hydrocarbons, including acetylenes and dienes, in the analysis of propylene.



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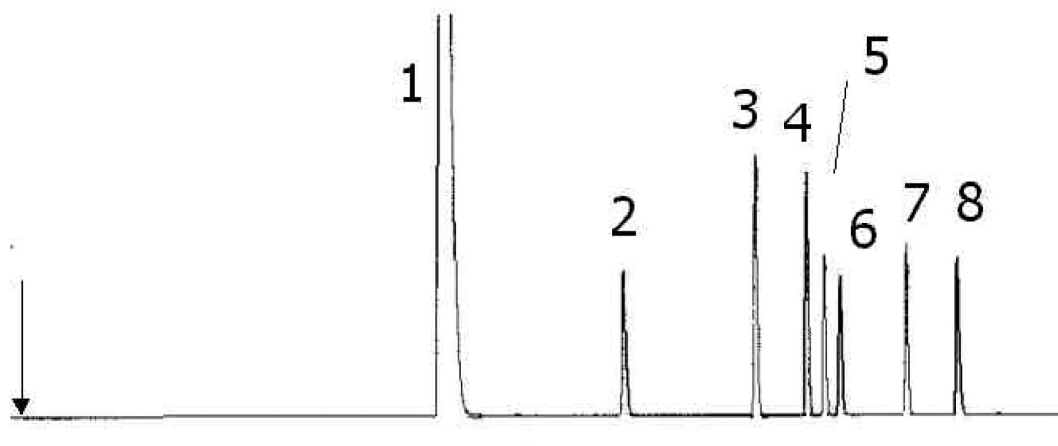
## Conditions

Technique : GC  
Column : Agilent Select Al<sub>2</sub>O<sub>3</sub> MAPD, 0.53 mm x 50 m fused silica, Part no. CP7432  
Temperature : 40 °C, 5min → 160 °C, 10 °C/min → 200 °C, 20 °C/min, hold 1 min  
Carrier Gas : He, 4 psig, 4 min → 11 psig, 0.5 psig/min, 2 min  
Injector : Split 60 mL/min  
Detector : FID  
Concentration Range : approx. 100 ppm in nitrogen, synthetic standard

Courtesy : J. Luong, Dow Chemical Canada

## Peak identification

1. propylene
2. propadiene
3. trans-2-butene
4. iso-butene
5. cis-2-butene
6. n-pentane
7. 1,2-butadiene
8. 1,3-butadiene



12 min

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This information is subject to change without notice.

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