

# Oxygenated hydrocarbons, C<sub>3</sub>

## Analysis of impurities in propylene

### Application Note

Energy & Fuels

#### Authors

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#### Introduction

Agilent PoraBOND U is a high polarity porous polymer, with a selectivity comparable with PoraPLOT U. This PLOT column is one of the new generation of adsorption materials where the stationary phase is not built by particles, but by an in-situ process forming an integrated layer. This results in high mechanical stability allowing high flow rates and valve switching.

In addition, a remarkable increase in temperature stability is obtained. PoraBOND U PLOT columns can be used up to 300 °C.



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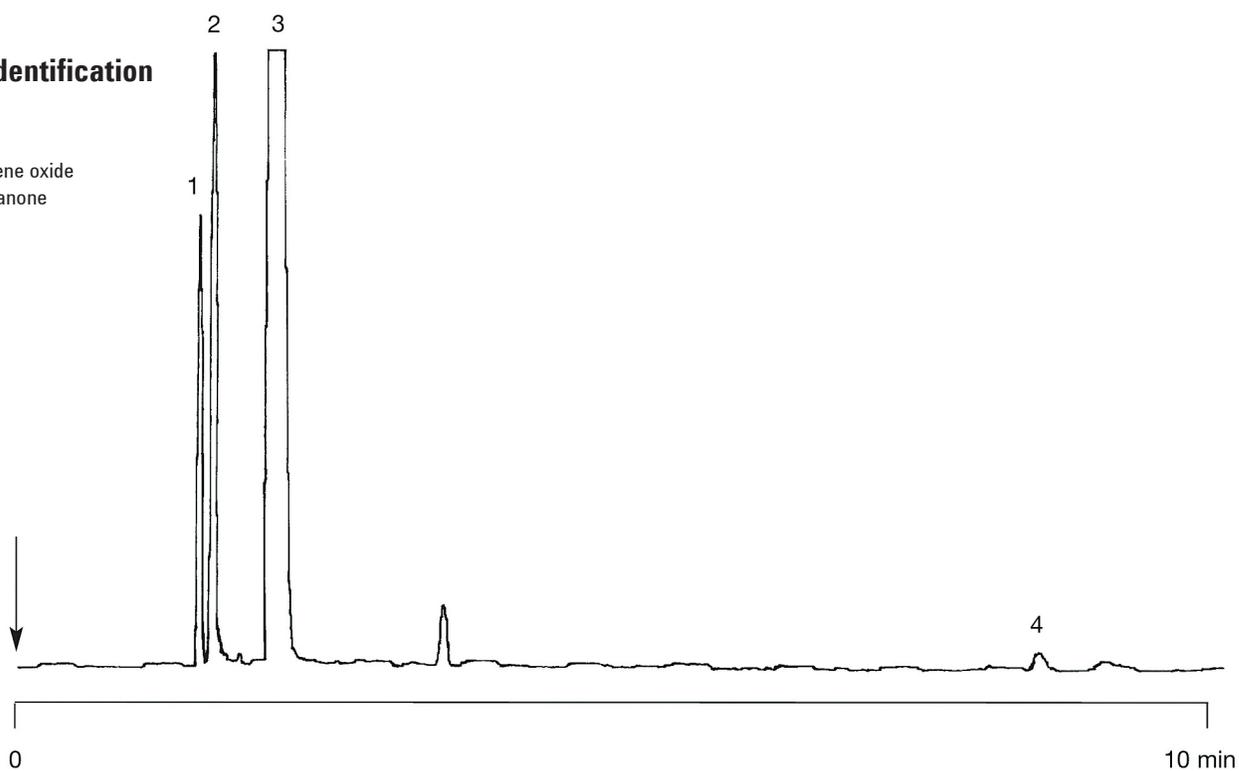
## Conditions

Technique : GC-capillary  
Column : Agilent PoraBOND U, 0.32 mm x 25 m fused silica  
PLOT (df = 7  $\mu$ m) (Part no. CP7381)  
Temperature : 170 °C  
Carrier Gas : He, 50 kPa (0.5 bar, 7 psi)  
Injector : Split,  
T = 250 °C  
Detector : PDD in HID mode;  
T = 250 °C  
Concentration Range : 50 - 100 ppm in propylene oxide

Courtesy : C. Duvekot, Agilent application laboratory,  
Middelburg, The Netherlands

## Peak identification

1. air
2. water
3. propylene oxide
4. 2-pentanone



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This information is subject to change without notice.

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