



Halogenated compounds and CO₂ in ethylene

Application Note

Materials Testing & Research

Authors

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Introduction

GC/MS analysis of impurities (halogenated and carbon dioxide) in ethylene is achieved in seven minutes with an Agilent CarboBOND column.



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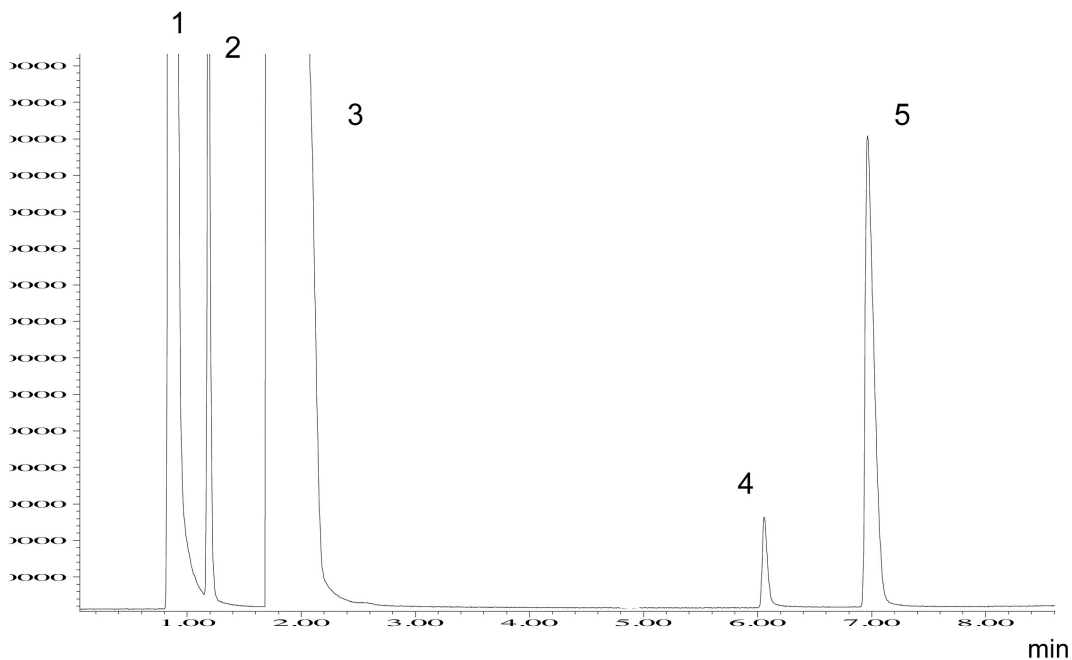
Conditions

Technique : GC
Column : Agilent CarboBOND, 0.53 mm x 25 m fused silica
(df = 10 µm) (Part no. CP7374)
connected with 0.1 mm x 20 cm methyl deactivated
fused silica at inlet
Temperature : 80 °C (1 min) → 300 °C, 25 °C/min
Carrier Gas : Helium, 20 kPa
Injector : Split, 10:1
Detector : MS
Sample Size : 0.5 mL
Concentration Range : standard with approx. 100 ppm impurities
Matrix : ethylene

Courtesy : Jim Luong, Dow Chemical Canada

Peak identification

1. air
2. carbon dioxide
3. ethylene
4. vinyl chloride
5. ethyl chloride



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This information is subject to change without notice.

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Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A01923



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