



# Halogenated hydrocarbons

## Analysis of trace halogenated hydrocarbons in acetaldehyde

### Application Note

Materials Testing & Research

#### Authors

Agilent Technologies, Inc.

#### Introduction

The Agilent CP-SilicaPLOT generates a high retention for volatile compounds. Acetaldehyde elutes from the column at 200 °C. The impurities present are well resolved and elute in front of the acetaldehyde, making low level quantification possible. Traces of water will not change retention time.



**Agilent Technologies**

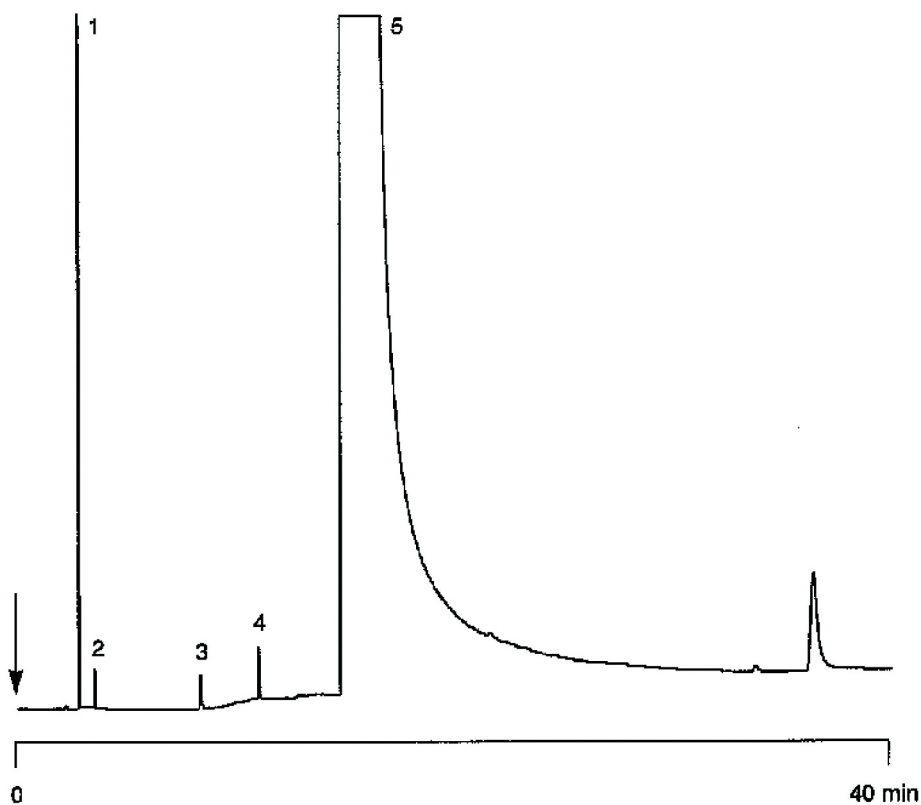
## Conditions

Technique : GC-capillary  
Column : Agilent CP-SilicaPLOT, 0.32 mm x 30 m, fused silica  
PLOT CP-SilicaPLOT (df = 4 µm) (Part no. CP8567)  
Temperature : 40 °C (2 min) →200 °C, 20 °C/min  
Carrier Gas : N<sub>2</sub>, 50 kPa (0.5 bar, 7 psi)  
Injector : Split 20 mL/min, T = 220 °C  
Detector : FID  
T = 220 °C  
Sample Size : 1.0 µL  
Concentration Range : ppm

Courtesy : H. Erlemeier,  
Zentrale Analytik,  
Hoechst AG, Germany

## Peak identification

	as w/w ppm
1. methane	
2. ethane	
3. chloromethane	30 ppm
4. chloroethane	40 ppm
5. acetaldehyde	matrix



[www.agilent.com/chem](http://www.agilent.com/chem)

This information is subject to change without notice.

© Agilent Technologies, Inc. 2011

Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A01357



**Agilent Technologies**