Halogenated hydrocarbons

Analysis of chlorinated volatiles and C_1-C_6 hydrocarbons

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-SilicaPLOT column separates nine chlorinated volatiles and hydrocarbons in 14 minutes.

Chloromethane (methyl chlorlde) and vinylchloride are separated well from butane and can be quantified accurately because of the high retention, good separation and peak shape that the CP-SilicaPLOT column produces.

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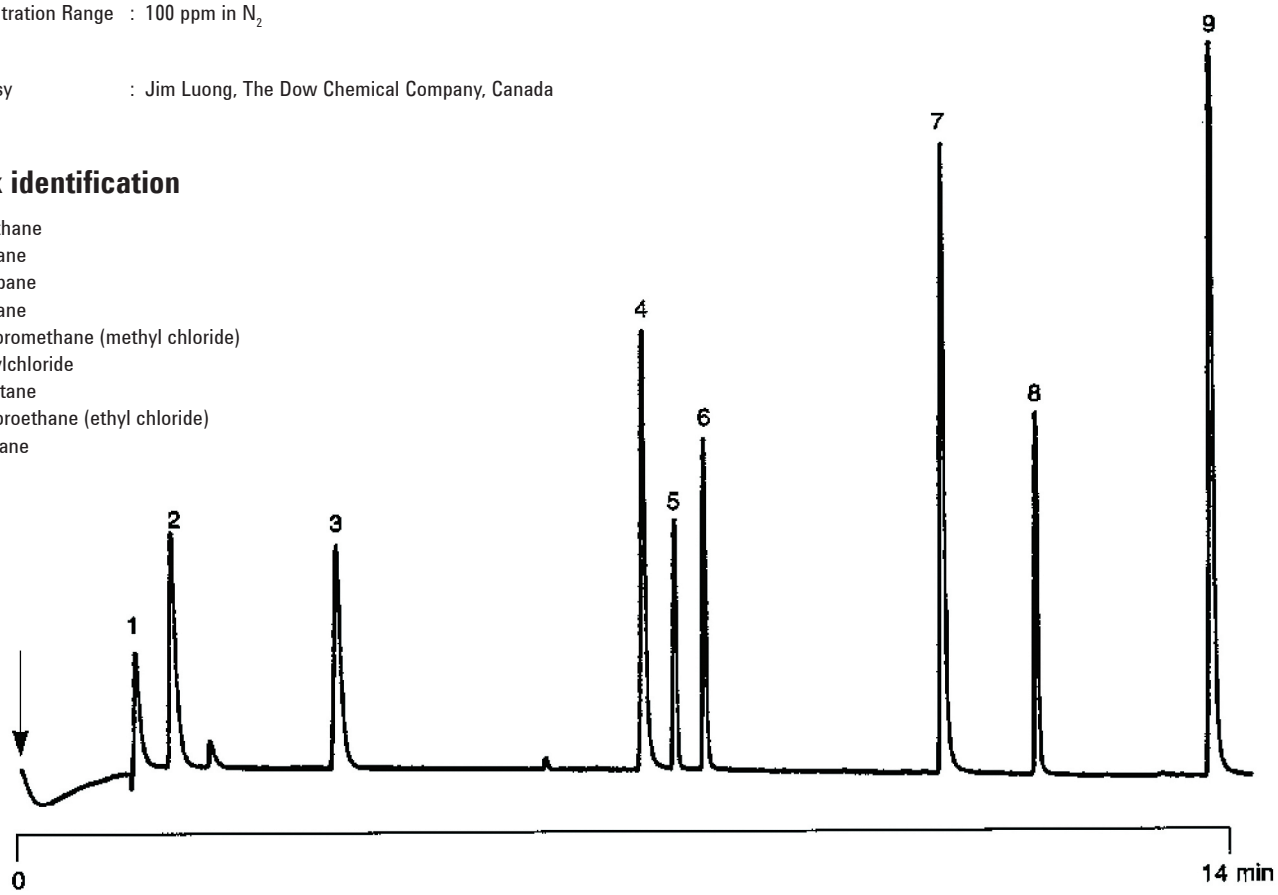
Conditions

Technique	: GC-capillary
Column	: Agilent CP-SilicaPLOT, 30 m x 0.32 mm, fused silica PLOT (df = 4 µm) (Part no. CP8567)
Temperature	: 30 °C (2 min) ⟶ 250 °C, 10 °C/min
Carrier Gas	: He, 210 kPa (2.1 bar, 30 psi)
Injector	: Split, 1:100 T = 200 °C
Detector	: FID T = 300 °C
Sample Size	: 1.0 mL
Concentration Range	: 100 ppm in N_2
Courtesy	: Jim Luong, The Dow Chemical Company, Canada

Peak identification

1. methane
2. ethane
3. propane
4. butane
5. chloromethane (methyl chloride)
6. vinylchloride
7. pentane
8. chloroethane (ethyl chloride)
9. hexane



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Printed in the USA
31 October, 2011
First published prior to 11 May, 2010
A01289

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