Halogenated hydrocarbons

Separation of CFCs on a bonded porous polymer

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

The Agilent PoraBOND Q column separates a range of very volatile CFCs at a starting temperature of 40 °C. For these components the selectivity of the column is almost the same as the Agilent PoraPLOT Q column. On an Agilent CP-SilicaPLOT column, the elution order of CFC 125 and CFC 143a is reversed and components CFC 1122 and CFC 134a co-elute.

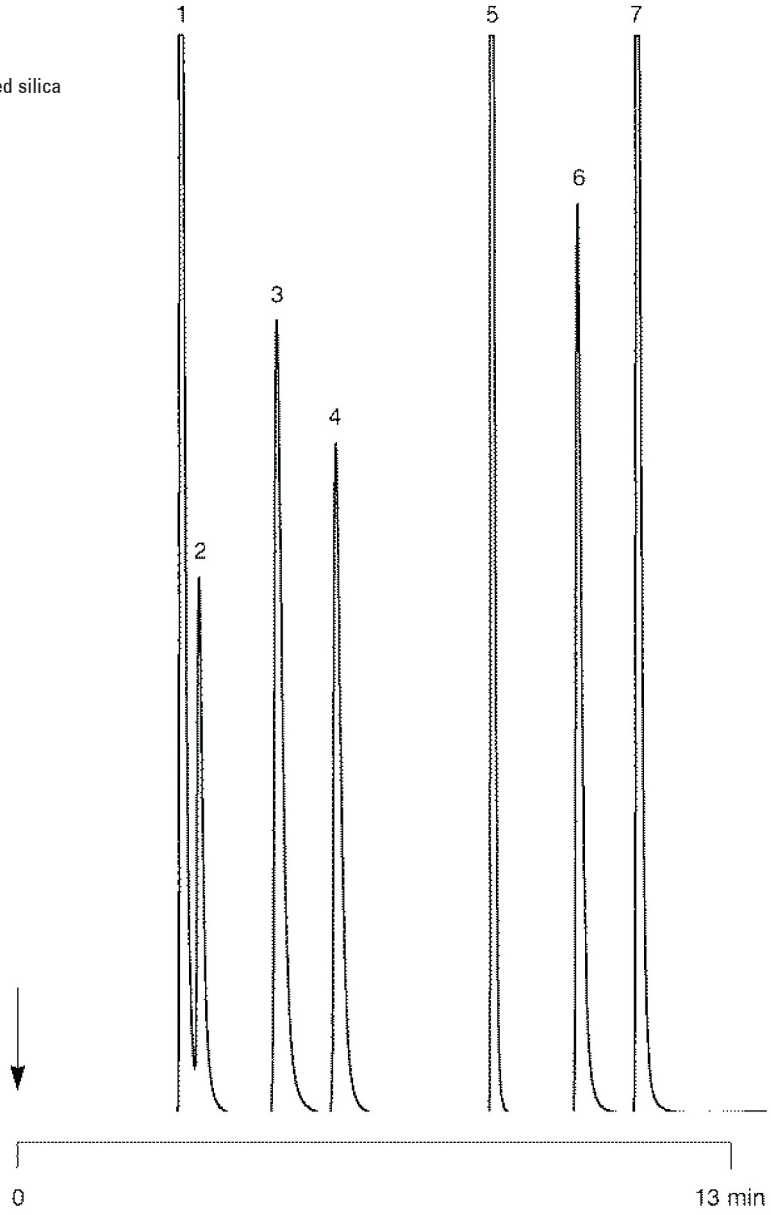
Agilent Technologies

Conditions

Technique	: GC-wide-bore
Column	: Agilent PoraBOND Q, 0.53 mm x 25 m fused silica PLOT (df = 10 µm) (Part no. CP7354)
Temperature	: 40 °C (5 min) ⟶ 220 °C, 10 °C/min
Carrier Gas	: He, 35 kPa (0.35 bar, 5 psi)
Injector	: Split, 50 mL/min T = 250 °C
Detector	: FID T = 250 °C
Sample Size	: 100 µL, 1% vol

Peak identification

1. CFC 143a
2. CFC 125
3. CFC 134a
4. CFC 134
5. CFC 1122
6. CFC 124
7. CFC 133a



www.agilent.com/chem

Printed in the USA
31 October, 2011
First published prior to 11 May, 2010
A01446

Agilent Technologies