



Chlorofluorocarbons

Separation of CFCs

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent PoraPLOT Q column separates eight chlorofluorocarbons in 16 minutes.



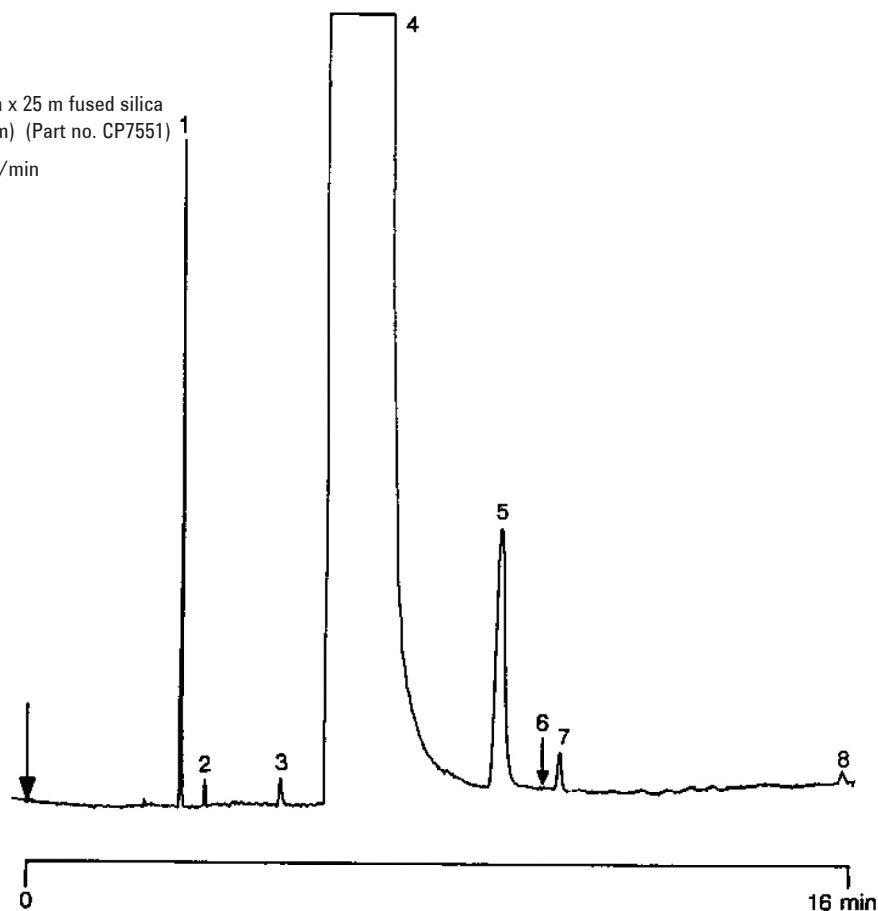
Agilent Technologies

Conditions

Technique : GC-capillary
Column : Agilent PoraPLOT Q, 0.32 mm x 25 m fused silica
PLOT PoraPLOT Q (df = 10 µm) (Part no. CP7551)
Temperature : 70 °C (2 min) → 150 °C, 5 °C/min
Carrier Gas : He, 65 kPa (0.65 bar, 9.3 psi)
Injector : direct, Valco 6 x 1/32" valve
T = 100 °C
Detector : FID
T = 250 °C
Sample Size : 50 µL
Concentration Range : 10 - 1000 pm

Peak identification

- | | |
|-------------|--------------------------------------|
| 1. CFC 23 | (CHF ₃) |
| 2. CFC 32 | (CH ₂ F ₂) |
| 3. CFC 143a | (CF ₃ CH ₃) |
| 4. CFC 22 | (CHF ₂ Cl) |
| 5. CFC 12 | (CF ₂ Cl ₂) |
| 6. CFC 31 | (CF ₂ FCl) |
| 7. CFC 142b | (CH ₃ CF ₂ Cl) |
| 8. CFC 21 | (CHFCl ₂) |



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

A00660



Agilent Technologies