Halogenated hydrocarbons, C_2

Monitoring vinylchloride (VCM) in air

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

The robust Agilent CP-SilicaPLOT column provides high retention for very volatile compounds. The major interference in a (VCM(production plant environmental air, 1,2-dichloroethane, is well separated. Detection limits are below 0.1 ppb.

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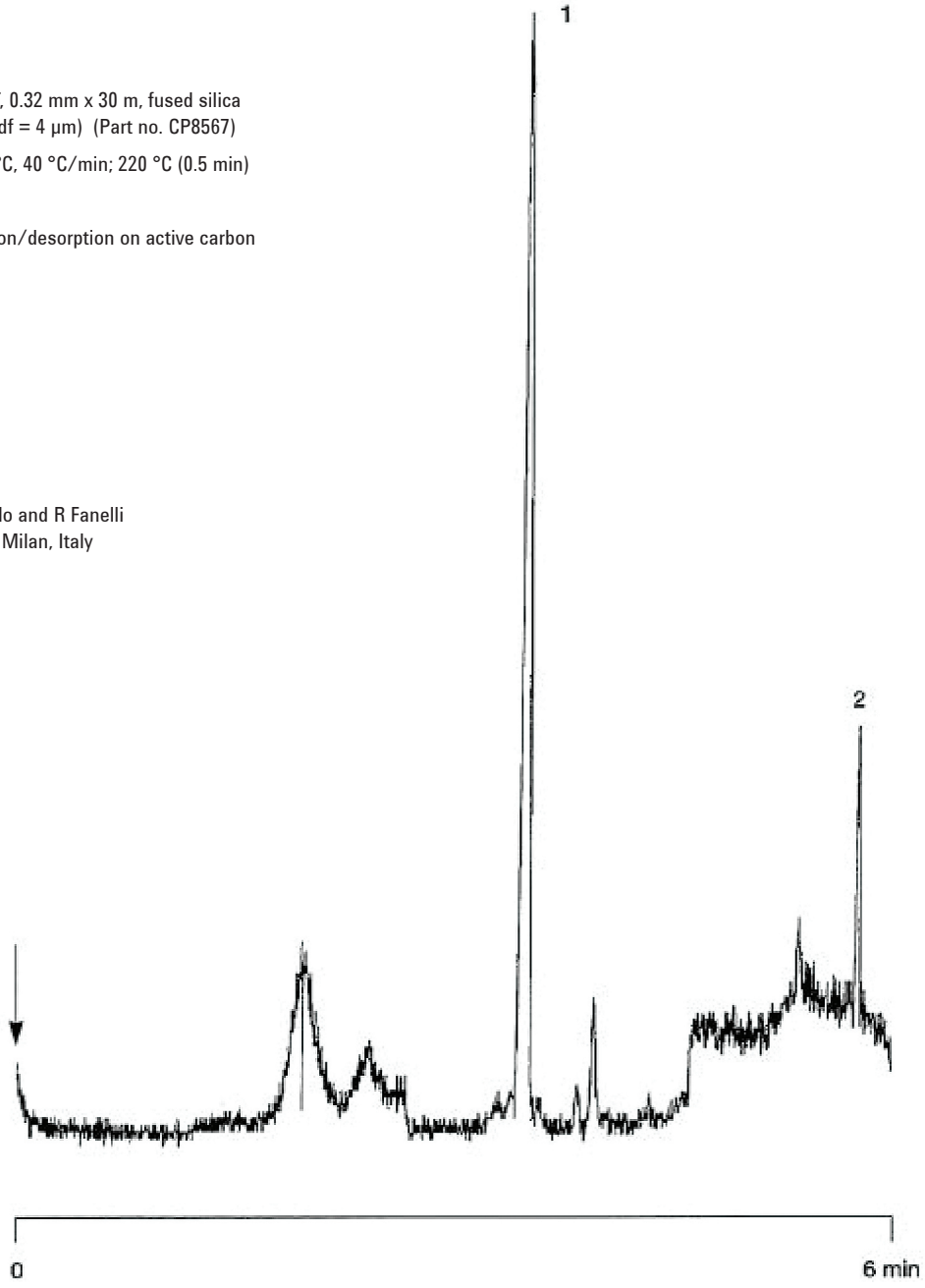
Conditions

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	:	50 °C (1 min) ⟶ 220 °C, 40 °C/min; 220 °C (0.5 min)
Carrier Gas	:	He
Injector	:	PTV, thermal adsorption/desorption on active carbon T_{ads} = 35 °C T_{des} = 320 °C
Detector	:	MSD, ion 62.00
Sample Size	:	300 mL
Concentration Range	:	0.1 - 1 ppb in air
Sample Matrix	:	air
Courtesy	:	E. Davoli, M. Natangelo and R Fanelli Mario Negri Institute, Milan, Italy

Peak identification

1. vinylchloride (VCM), 1 ppb level
2. 1,2-dichloroethane



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Printed in the USA
31 October, 2011
First published prior to 11 May, 2010
A01383

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