



Volatile chlorinated compounds, sulfur compounds

Separation of hydrogen chloride and sulfuryl chloride

Application Note

Materials Testing & Research

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Introduction

The Agilent PoraBOND Q has a unique inertness, which results in the elution of difficult compounds. This application shows the separation of sulfuryl chloride from hydrogen chloride. Both compounds elute as sharp peaks, making low level quantification possible. Also, higher boiling materials can be quantified as the PoraBOND Q can be heated up to 300 °C for fast elution and short analysis times. Pressure pulses caused by valve injections cannot damage the column as the PoraBOND Q has a chemically bonded integrated adsorption layer, which does not contain particles.



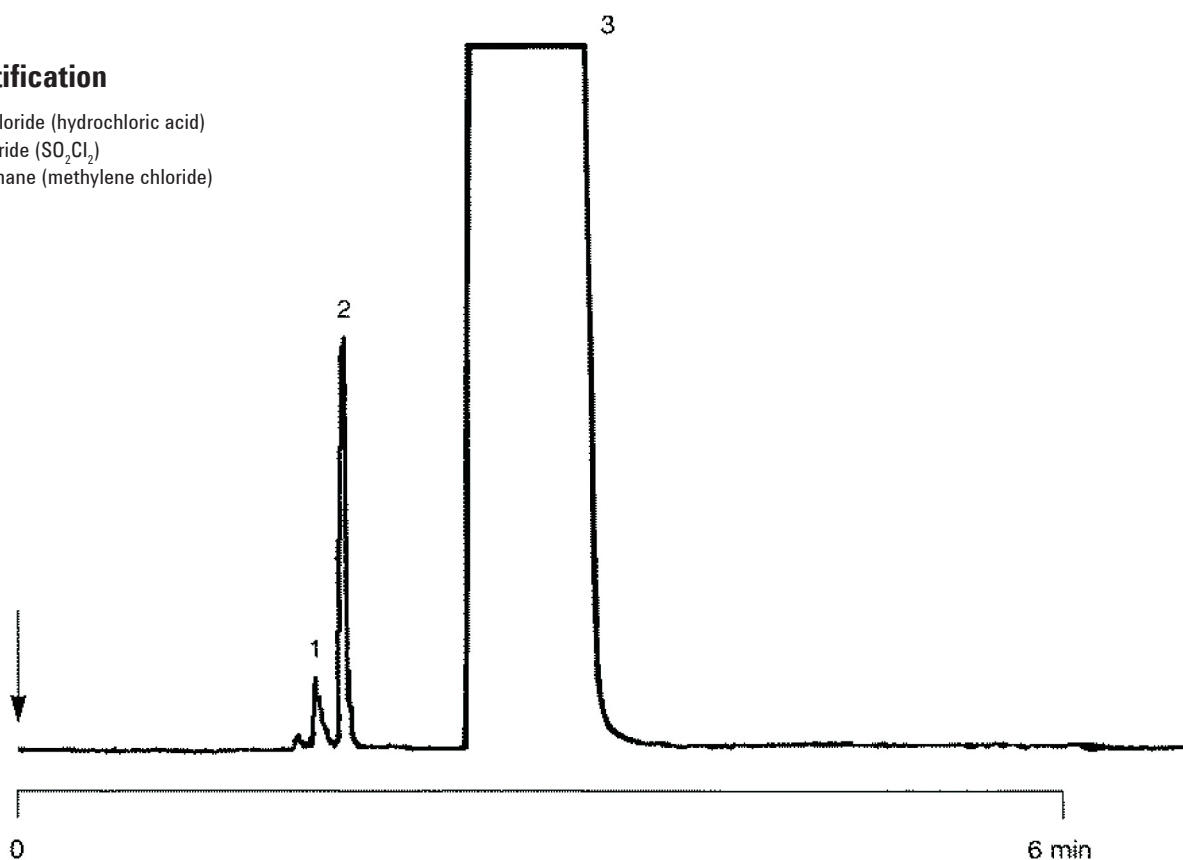
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Conditions

Technique : GC-capillary
Column : Agilent PoraBOND Q, 0.32 mm x 25 m, fused silica
PLOT (df = 5 μ m) (Part no. CP7351)
Temperature : 120 °C (1 min) \rightarrow 200 °C, 20 °C/min
Carrier Gas : He, 100 kPa (1 bar, 14 psi)
Injector : Split,
T = 200 °C
Detector : μ -TCD
T = 250 °C
Concentration Range : ca 1000 ppm
Solvent Sample : dichloromethane (methylene chloride)

Peak identification

1. hydrogen chloride (hydrochloric acid)
2. sulfuryl chloride (SO₂Cl₂)
3. dichloromethane (methylene chloride)



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This information is subject to change without notice.

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Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A01427



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