



Gases

Separation of gases in polyurethane

Application Note

Materials Testing & Research

Authors

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Introduction

Polyurethane was dissolved in concentrated sulfuric acid. After 2 hours at 60 °C a headspace sample was taken and analyzed on an Agilent CP-SilicaPLOT column. The carbon dioxide peak is well separated from the air peak and shows good symmetry using TCD.



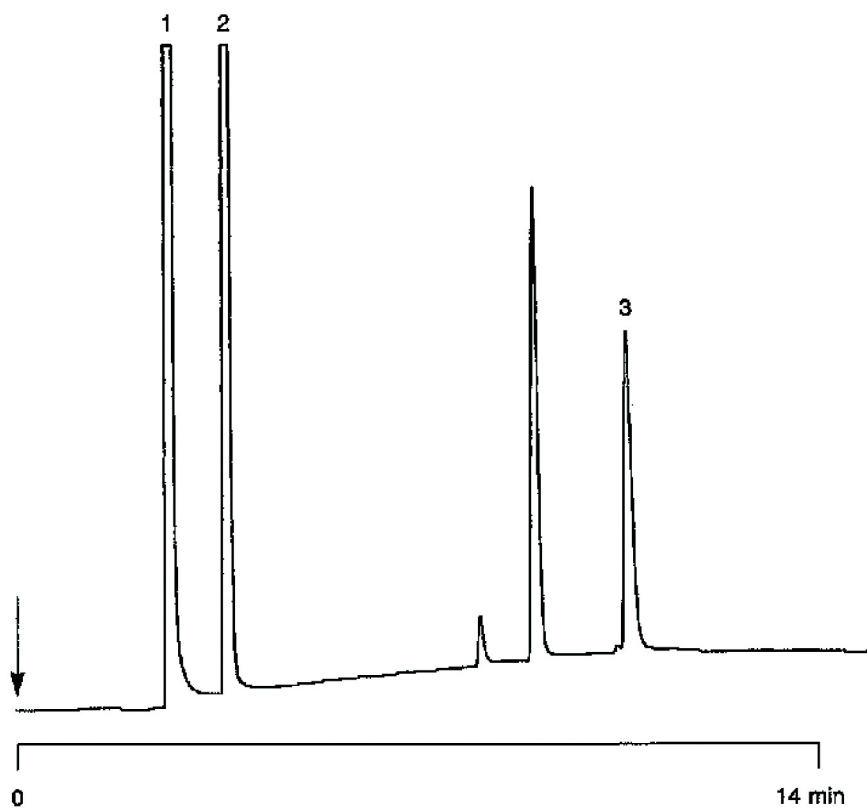
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Conditions

Technique : GC-capillary
Column : Agilent CP-SilicaPLOT, 0.32 mm x 30 m, fused silica
PLOT CP-SilicaPLOT (df = 4 μ m) (Part no. CP8567)
Temperature : 40 °C (2 min) \rightarrow 200 °C, 20 °C/min
Carrier Gas : He, 50 kPa (0.5 bar, 7 psi)
Injector : Split, 50 mL/min
T = 200 °C
Detector : TCD at 100 mA
T = 200 °C
Sample Size : 1 mL
Concentration Range : % level
Courtesy : H. Erlemeier,
Zentrale Analytik,
Hoechst AG, Germany

Peak identification

1. argon, oxygen and nitrogen
2. carbon dioxide
3. pentane



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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

A01355



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