



Lactic acid

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

Acids can be analyzed on thick-film non-polar phases such as Agilent CP-Sil 5 CB. The lactic acid and derivatives remain difficult as overloading will rapidly deform the peak shape. It is important to make allowances for frequent maintenance of injection port liners, as well as cutting a short piece of the inlet section between a series of measurements.



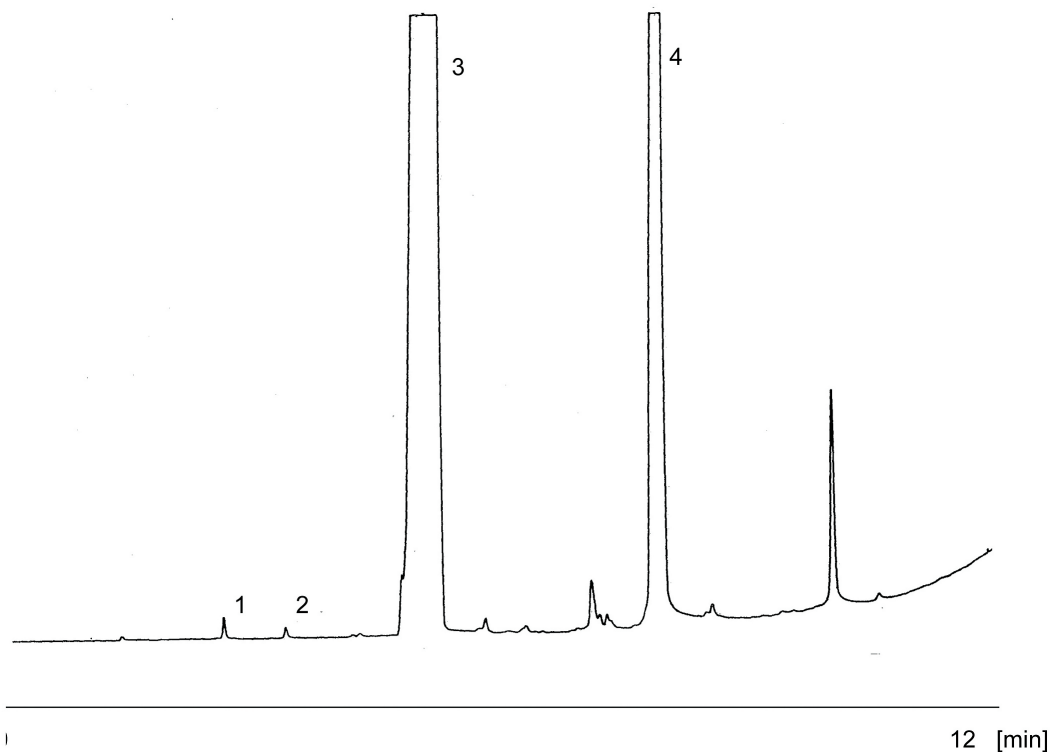
Agilent Technologies

Conditions

Technique : GC
Column : Agilent CP-Sil 5 CB, 0.53 mm x 25 m fused silica
(df = 5.0 μ m) (Part no. CP7675)
Temperature : 40 °C (6 min), 10 °C/min \rightarrow 200 °C
Injection : Split, 1:40, T = 225 °C
Detection : FID
Carrier Gas : N₂, 5.0 mL/min
Injection Vol. : 0.2 μ L
Sample Solvent : water

Peak identification

1. acetic acid
2. propionic acid
3. lactic acid (95%)
4. lactoyl lactic acid



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

A02436



Agilent Technologies