

Carbohydrates (as alditol acetates)

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

The Agilent FactorFour VF-23ms bonded phase is a highly polar phase with high cyano substitution having an optimized stabilization structure. Combined with fused silica surface treatment a temperature stability of up to 260 °C isothermally was realized which results in very low bleed. Accurate quantification of trace components as well as fast stabilization and reduced contamination of detection systems (such as ms) are obtained. Due to the high cyano content and the special bonding technology, this phase is very stable.



Conditions

Technique : GC

Column : Agilent VF-23ms, 0.53 mm x 15 m fused silica

 $(df=0.50~\mu m)~$ (Part no. CP8830)

Temperature : 230 °C & 210 °C

Carrier Gas : Hydrogen, 7 kPa & 35 kPa

Injector : Split, 1:100

T = 275 °C

 $\begin{array}{lll} \mbox{Detector} & : \mbox{ FID} \\ \mbox{Sample Size} & : \mbox{ 0.1 } \mbox{ } \mbo$

Concentration Range : ca. 5 ng per component on the column

Solvent Sample : 0.2% in Hexane, components as alditol acetates

Courtesy : J. Peene, Agilent R&D laboratories, Middelburg,

The Netherlands

Peak identification

1. rhamnitol

2. fucitol

3. ribitol

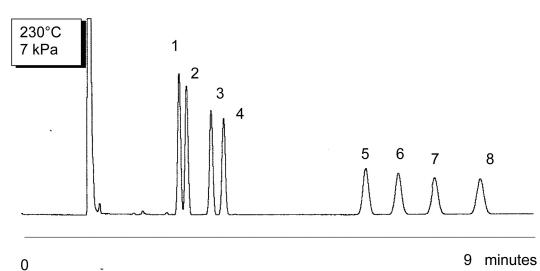
4. arabinitol

5. mannitol

6. galactitol

7. clucitol

8. inositol



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

A01968

