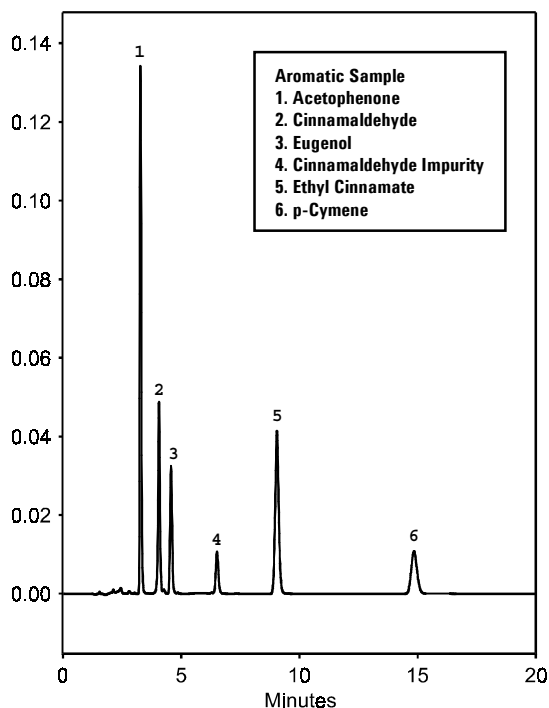




## Aromatics

### Application Food Analysis Robert Ricker

Aromatics are used in both the flavor and fragrance industries. Only a few of the many compounds that can be classified as aromatic were separated for this application note. The odors of the various aromatics in this study are as follows: acetophenone has an orange-blossom-like odor; cinnamaldehyde is found in some cinnamon oils and has a characteristic cinnamon odor; eugenol has an odor of cloves and is also used as a dental analgesic; ethyl cinnamate has a fruity and balsamic odor reminiscent of cinnamon. Cymene occurs in a number of essential oils, but no odor is described in the literature.



Conditions:  
Column: ZORBAX Eclipse XDB-Phenyl, 4.6 x 150 mm (3.5µm) Agilent P/N: 963967-912  
Mobile Phase: H<sub>2</sub>O : MeOH, 40:60  
UV: 254 nm; Flow: 1.0 mL / min.; 35°C

### Highlights

- Neutral compounds have excellent peak shape on Agilent ZORBAX Eclipse XDB-Phenyl columns.
- Efficiency can be increased with the use of smaller size (3.5 µm vs. 5.0 µm) particles. Plate counts of 13,000 - 18,000 were achieved for the five compounds in this application.



Agilent Technologies

*Robert Ricker is an application chemist  
based at Agilent Technologies, Wilmington,  
Delaware.*

For more information on our products and  
services, visit our website at:  
[www.agilent.com/chem](http://www.agilent.com/chem)

Copyright© 2002 Agilent Technologies, Inc.  
All Rights Reserved. Reproduction,  
adaptation or translation without prior  
written permission is prohibited, except as  
allowed under the copyright laws.

Agilent shall not be liable for errors  
contained herein or for incidental or  
consequential damages in connection with  
the furnishing, performance, or use of this  
material.

Information, descriptions, and specifications  
in this publication are subject to change  
without notice.

Printed in the USA  
April 25, 2002  
5988-6352EN



**Agilent Technologies**