



Impurities in ethylene oxide

Fast analysis of impurities in ethylene oxide

Application Note

Materials Testing & Research

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Sil 5 CB column and Agilent 490 Micro GC separates carbon dioxide and water impurities in ethylene oxide in 26 seconds.



Agilent Technologies

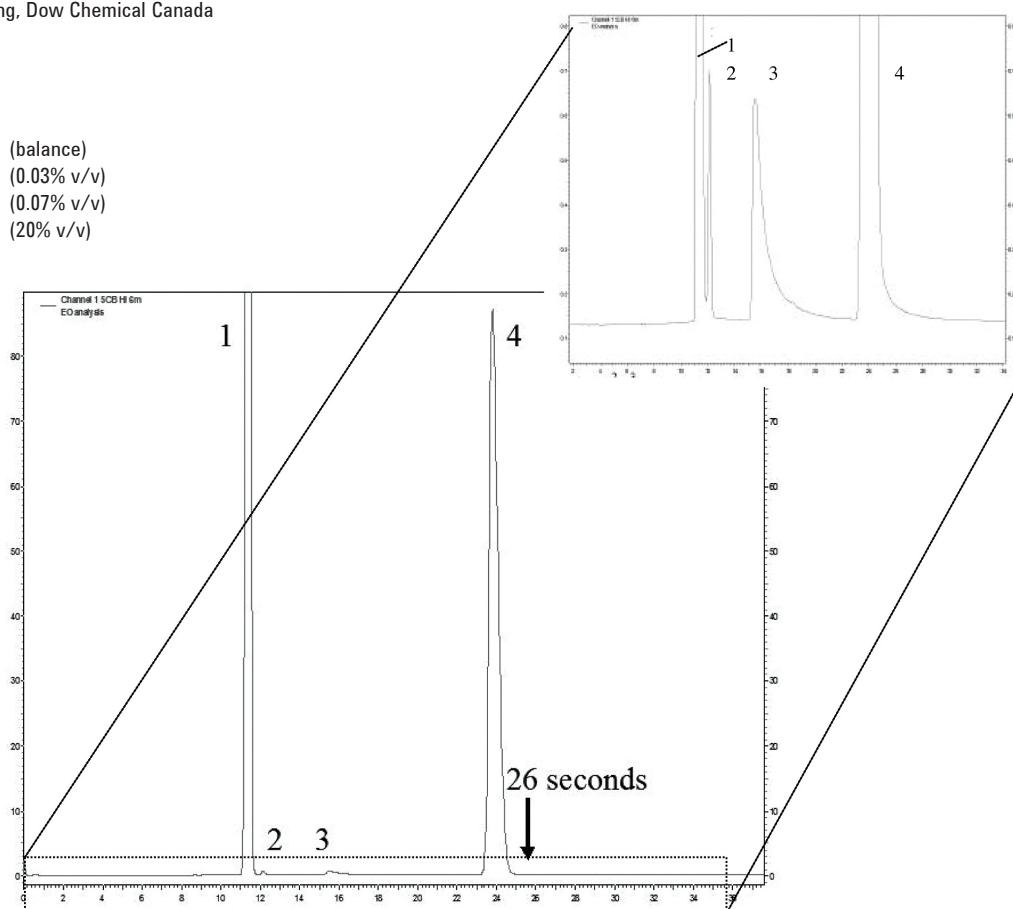
Conditions

Technique : Micro-GC
GC-Channel : Agilent CP-Sil 5 CB
Temperature : 40 °C
Carrier Gas : Helium, 26 psig
Injector : 50 ms, 110 °C
BackFlush : after 7 s
Detector : chip TCD

Courtesy : Jim Luong, Dow Chemical Canada

Peak identification

- | | | |
|-----------|-----------------|-------------|
| 1. 11.5 s | air | (balance) |
| 2. 12.1 s | CO ₂ | (0.03% v/v) |
| 3. 14.7 s | water | (0.07% v/v) |
| 4. 24.0 s | ethylene oxide | (20% v/v) |



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

A02060



Agilent Technologies