

# Permanent Gas Analysis – Separation of Argon and Oxygen on a MolSieve 5A Column using the Agilent 490 Micro GC

## Application Note

Micro Gas Chromatography, Permanent Gas Analysis

### Authors

Mohamed Bajja and Remko van Loon  
Agilent Technologies, Inc.  
Middelburg  
The Netherlands



### Introduction

This application note shows an example of the analysis of permanent gases, including the separation of Argon and Oxygen, using the Agilent 490 Micro GC. For the separation of Argon and Oxygen, a High Resolution 20 m MolSieve 5A column is used.

The advantage of the Agilent 490 Micro GC is speed of analysis. Even with the 20 m HR MolSieve 5A column, you get the results fast. Total analysis time for the permanent gases until Nitrogen is approximately 3 minutes. The Agilent 490 Micro GC delivers lab-quality separations in an ultra-compact, portable instrument.



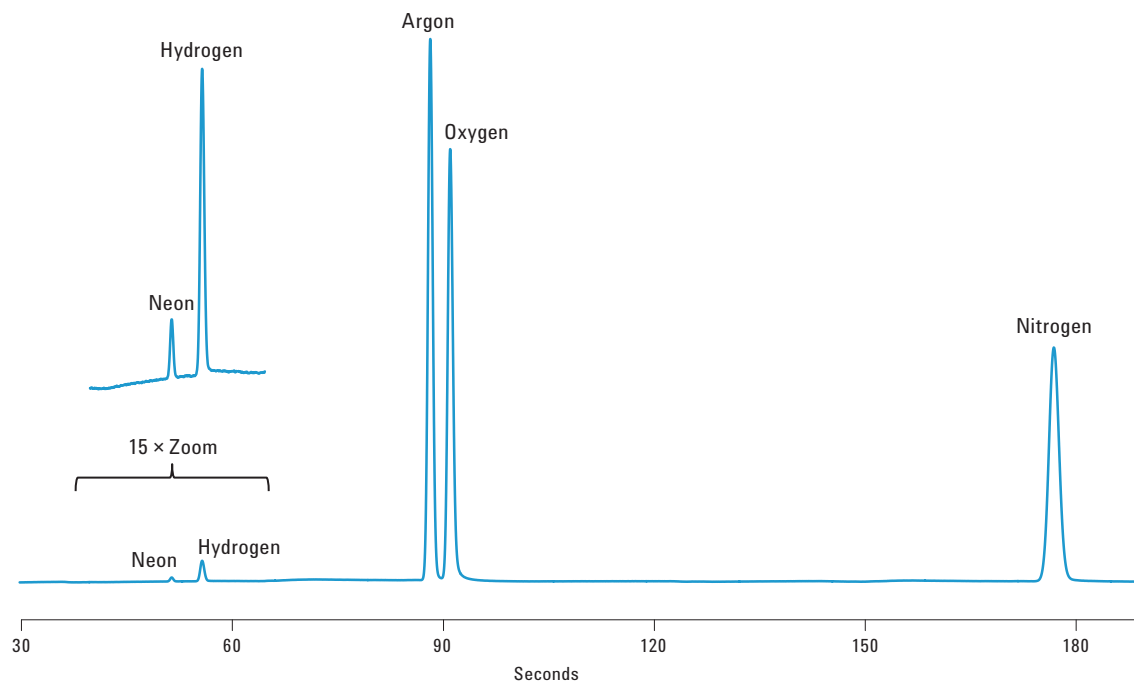
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## Instrumentation

Instrument	Agilent 490 Micro GC (G3581A)
Column channel	20 m MolSieve 5A
Column temperature	40 °C
Carrier gas	Helium, 200 kPa
Injection time	40 msec

## Sample information

Neon	18 ppm
Hydrogen	1.0 %
Argon	0.2 %
Oxygen	0.2 %
Nitrogen	0.2 %
Helium	matrix



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