

Younglin Application Note

REF No. : YL-APP-986002

Subject : Gas Components Analysis for White Tooth Paste

Key Words

: GC(Gas Chromatography)
TCD, Alltech CTR 1 Column



1. Introduction

Gas components emitted from a white tooth paste commercially available were analyzed by Younglin 600D GC. Alltech CTR 1 Column specially designed for gas separation and TCD were used for the analysis.

2. Instrument :

- Younglin 600D GC
- Younglin Autochro-WIN

3. Analysis conditions

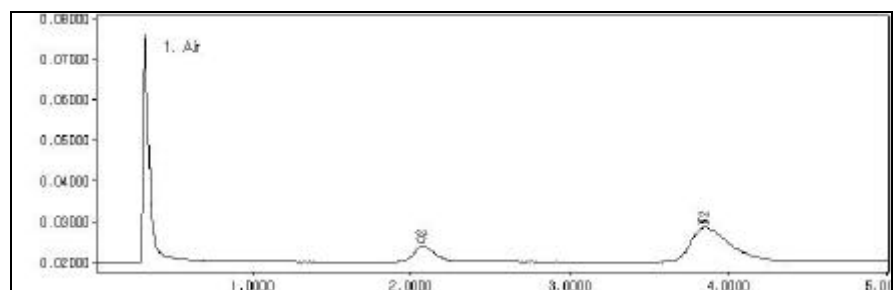
- Column : Alltech CTR1 (P/N 8700)
- Flow rate : 55 ml/min(Helium)
- Temp.(Inj, Oven, Det) : 25°C
- Detector : TCD
- TCDSEN : 5
- Range : 0
- Injection Volume : 500µl

4. Sample

As oxygen and nitrogen in air could not be completely removed, background correction was made for air and used for sample as gas phase emitted from a white tooth paste.

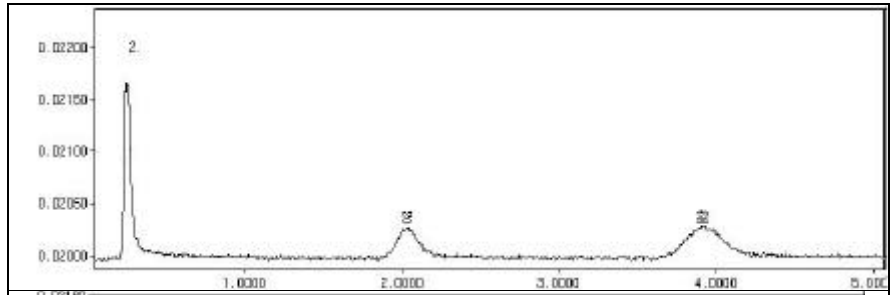
5. Results

1. Air chromatogram for background correction

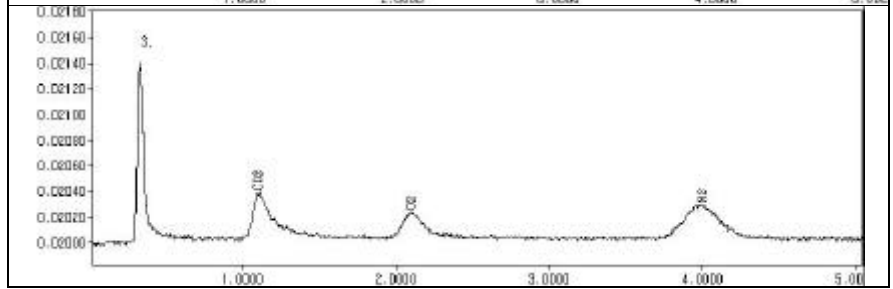




2. Chromatogram for tooth paste 1



3. Chromatogram for tooth paste 2



i. Discussion

Oxygen was detected at 2 min and CO₂ was detected at 1 min in the chromatogram for tooth paste 2.