

Younglin Application Note

REF No. : YL-APP-986003

Subject : Volatile Organic Compounds Analysis in Polyester

Key Words

: Polymer, Additives, Volatile Organic Compounds, GC



1. Introduction

Small difference in average molecular weight and molecular weight distribution and polymer additives components can affect the physical properties of final polymer products. After extraction of volatile organic compounds by adding heat to polyester, the extract was analyzed by GC. The result can be applied to the analysis of the polyester physical properties.

2. Instrument

- Younglin 600D GC with Younglin Autochro-WIN Data System

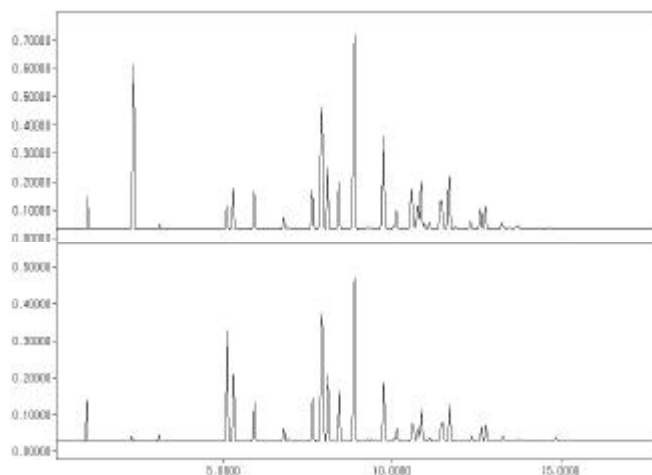
3. Analysis conditions

- Column : HP-5(25m x 0.32mm x 0.53µm)
- Detector : FID
- Inj.temp. : 230°C
- Det.temp. : 250°C
- Oven temp.(Programming) : 50°C (2min) to 150°C (5min) at 5°C/min
- Column Flow : 3.1ml/min
- Injection Volume : 0.5ml

4. Sample : Polyester

5. Chromatogram

- Polyester 2A ¾



6. Discussion

- The chromatogram for additives can be applied to the analysis of the physical properties of polyester