

# Younglin Application Note

REF No. : YL-APP-986008

## Subject : The Analysis of Paraben Mixture

### Key Words

: Reproducibility, Paraben mixture, %RSD



### Introduction

In order to evaluate the reproducibility of Young HPLC System, Paraben mixture (Uracil, Ethyl paraben, Propyl paraben) was analyzed for 5 times and tested the reproducibility of M930 gradient pump compared by %RSD.

### Instrument

- Younglin 9600 HPLC
- Younglin Autochro-WIN

### Analysis conditions

- Column : Waters Nova-pak C18 3.9; 300 mm
- Flow rate : 1 ml/min
- Mobile Phase : Methanol : Water = 6 : 4
- Detector : UV 254nm

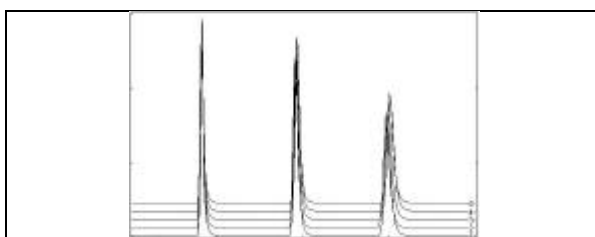
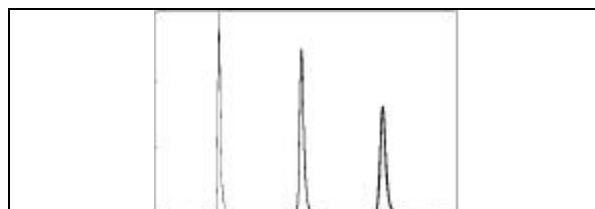
### Sample

3 kinds of Paraben mixture (10ppm, 25ppm)

Paraben 10ppm		Younglin	HP
RT	Uracil	0.086	0.102
%RSD	Ethyl paraben	0.201	0.491
n	Propyl	0.246	0.537
Area	Uracil	0.357	0.605
%RSD	Ethyl paraben	0.247	1.993
D	Propyl	0.272	1.989

Paraben 25ppm		Younglin	HP
RT	Uracil	0.104	0.147
%RSD	Ethyl paraben	0.439	0.079
D	Propyl	0.675	0.075
Area	Uracil	0.373	0.531
%RSD	Ethyl paraben	0.208	1.125
D	Propyl	0.233	1.085

### Chromatogram Overlay (n=5)



Discussion : Good % RSD for retention time and area was showed compared with HP HPLC.