YOUNG LIN INSTRUMENT

Younglin
FIRST & BEST

Younglin Application Note

REF No. : YL-APP-986004

Subject : Amine Compounds Analysis from Spandex Producing Process

Key Words
: Amines, GC

¡ ÝIntroduction

DMAC(Dimethylacetamide) and DEA(Diethylamide), EDA(Ethylenediamine), and PDA(Propylene diamine) as connection agents are used for synthetic process of Spandex. Those components were analyzed by GC to control the production process for Spandex Synthesis.

¡ ÝInstrument

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

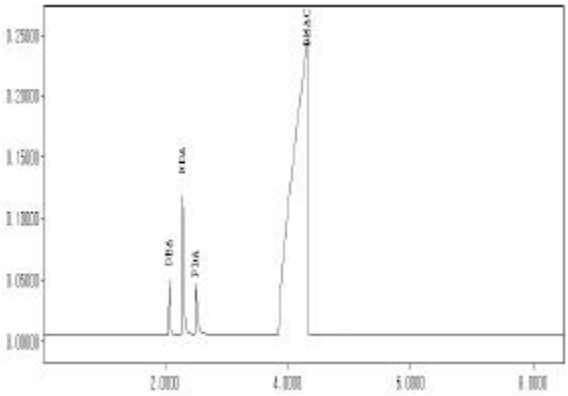
¡ ÝAnalysis conditions

- Column : HP-5MS(30m x 0.25mm x 0.25¥ ìm)
- Inj.temp. : 280¡ É
- Det.temp. : 280¡ É
- Oven temp.(Programing) : 80¡ É(3min) to 150¡ É(1min) at 10¡ É/min
- Detector : FID
- Column Flow : 1.4ml/min

Sample	Name	RT
DEA	Diethylamine	2.001
EDA	Ethylenediamine	2.218
PDA	Propylenediamine	2.435
DMAC	Dimethylacetamide	4.213

¡ ÝSample

¡ ÝChromatogram



¡ ÝDiscussion

Due to big tailing of DEA, EDA and PDA in
polar column, non-polar column, HP-5 MS was used for analysis.