

CoreFocus Report

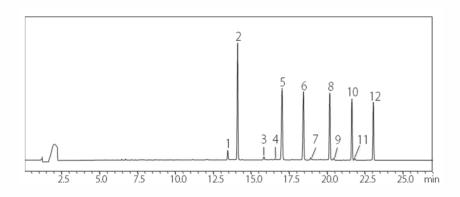
No.312

GC FTD AOC SH Series

## SH-5

## **Analysis of Lower Aliphatic Aldehydes**

Keywords: Aldehydes, DNPH (2,4-dinitrophenylhydrazine)



- 1. acetaldehyde-DNPH1
- 2. acetaldehyde-DNPH2
- 3. propionaldehyde-DNPH1
- 4. i-butylaldehyde-DNPH1
- 5. propionaldehyde-DNPH2
- 6. i-butylaldehyde-DNPH2
- 7. n-butylaldehyde-DNPH1
- 8. n-butylaldehyde-DNPH2
- 9. i-valeraldehyde-DNPH1
- 10. i-valeraldehyde-DNPH2
- 11. n-valeraldehyde-DNPH1
- 12. n-valeraldehyde-DNPH2 (1 µg/mL Ethyl Acetate Solution)

 $\begin{tabular}{lll} Model & : Nexis$^{TM}$ GC-2030 / AOC-20i \\ Software & : LabSolutions$^{TM}$ LC/GC \\ \end{tabular}$ 

Injection Unit Temperature : 200 °C

Injection Mode : Splitless (Sampling time: 1 min; then split (1:30))

Sample Injection Volume : 1 mL

Column : SH-5 (30 m x 0.25 mm l.D. df = 0.25 mm), P/N: 221-75701-30

Column Temperature : 80 °C (1 min) - 20 °C/min - 200 °C (10 min) – 5 °C/min - 250 °C (0 min) Total 27 min

Carrier Gas : He (99.999 %)

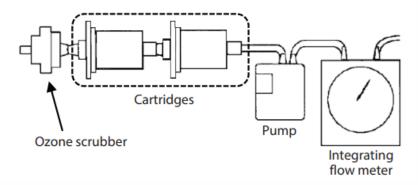
Carrier Gas Control : Constant linear velocity (41.7 cm/s, purge flowrate: 3 mL/min)

Detector : FTD-2030 (Flame Thermionic Detector)

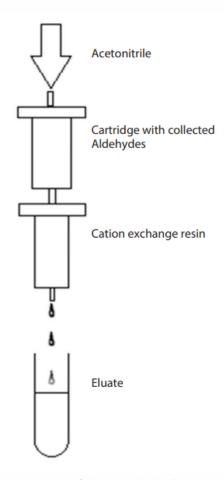
Detector Temperature : 280 °C Current : 1.00 pA

Detector Gas Flowrate : H<sub>2</sub>: 1.5 mL/min, Air: 145 mL/min

Makeup Gas Flowrate : 27.5 mL/mi (He)



Schematic Diagram of Collection Method



Schematic Diagram of Elution Method Collection Method

Source: Application News G292 (JP, ENG)

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