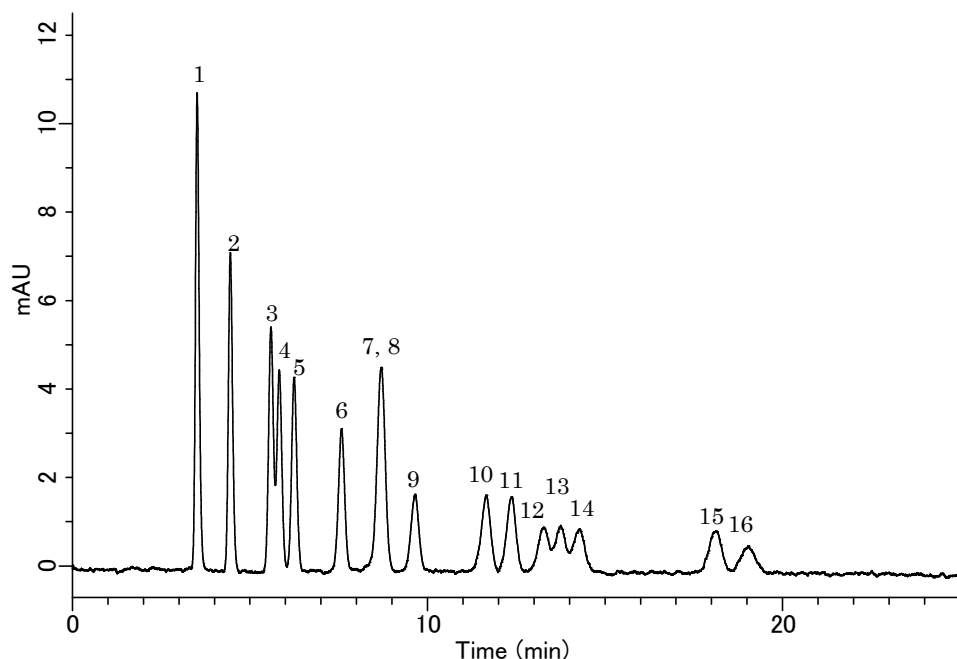


# InertSearch™ for LC

Inertsil® Applications

## Analysis of 16 kinds of Aldehydes (Ditected by Pre-Column Method with DNPH)

Data No. LA594-0696



### Conditions

**System** : GL-7400 HPLC system  
**Column** : Inertsil ODS-P (5 µm, 250 x 4.6 mm I.D)  
**Column Cat. No.** : 5020-02002  
**Eluent** : A) CH<sub>3</sub>CN  
          : B) H<sub>2</sub>O  
          : A/B = 60/40, v/v  
**Flow Rate** : 1.5 mL/min  
**Col. Temp.** : 45 °C  
**Detection** : UV 360 nm (GL-7450 UV Detector)  
**Injection Vol.** : 10 µL  
**Sample** : Aldehydes

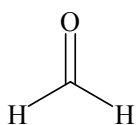
### Analyte:

1. Formaldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
2. Acetaldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
3. Acetone [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
4. Acrolein [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
5. Propionaldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
6. Crotonaldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
7. iso-Butyraldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
8. n-Butyraldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
9. Benzaldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
10. iso-Valeraldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
11. n-Valeraldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
12. o-Tolualdehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
13. m-Tolualdehyd [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
14. p-Tolualdehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
15. Hexanal [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)
16. 2,5-dimethylbenzaldehyde [Deriv.]	(200 mg/L in CH <sub>3</sub> CN)

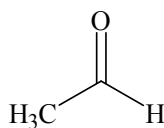
## Analysis of 16 kinds of Aldehydes (Detected by Pre-Column Method with DNPH)

Data No. LA594-0696

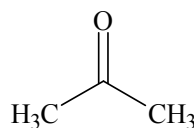
### Chemical Structure



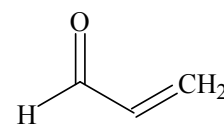
1. Formaldehyde



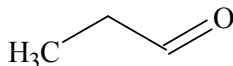
2. Acetaldehyde



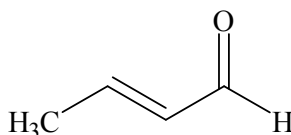
3. Acetone



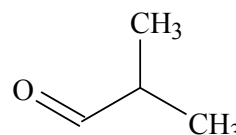
4. Acrolein



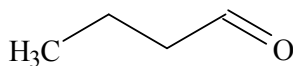
5. Propionaldehyde



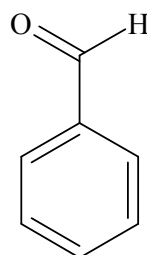
6. Crotonaldehyde



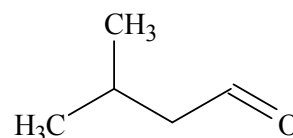
7. iso-Butyraldehyde



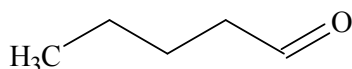
8. n-Butyraldehyde



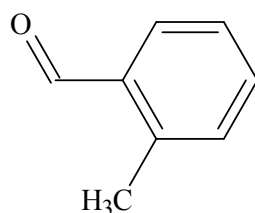
9. Benzaldehyde



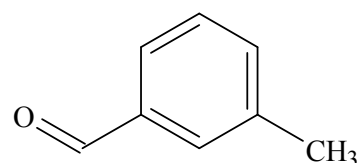
10. iso-Valeraldehyde



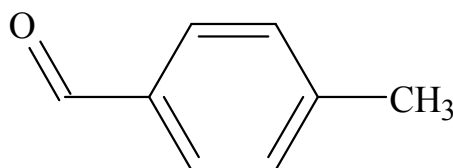
11. n-Valeraldehyde



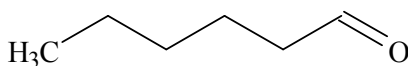
12. o-Tolualdehyde



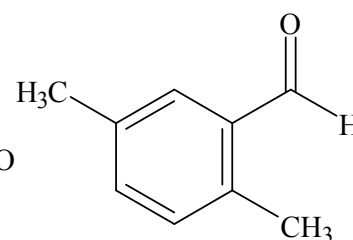
13. m-Tolualdehyde



14. p-Tolualdehyde



15. Hexanal



16. 2,5-dimethylbenzaldehyde