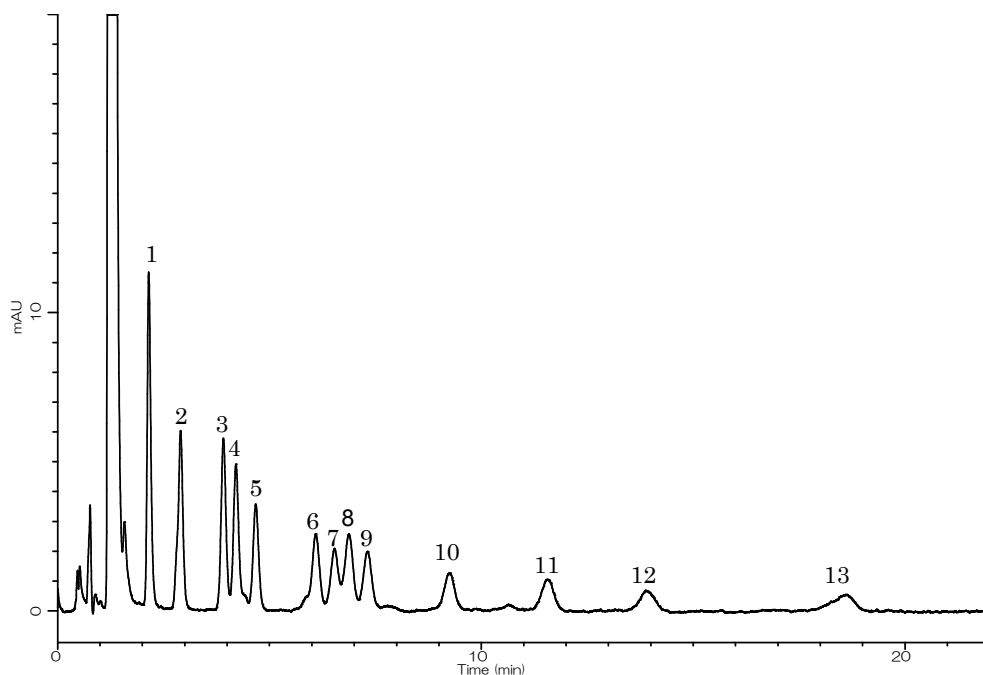


# InertSearch™ for LC

Inertsil® Applications

## Analysis of 13 kinds of Aldehydes (Detected by Pre-Column Method with DNPH)

Data No. LA595-0696



### Conditions

**System** : GL-7400 HPLC system  
**Column** : Inertsil ODS-SP (3  $\mu$ m, 75 x 3.0 mm I.D.)  
**Column Cat. No.** : 5020-02823  
**Eluent** : A) CH<sub>3</sub>CN  
          : B) H<sub>2</sub>O  
          : C) THF  
          : A/B/C = 33/57/10, v/v/v  
**Flow Rate** : 0.8 mL/min  
**Col. Temp.** : 50 °C  
**Detection** : UV 360 nm (GL-7450 UV Detector)  
**Injection Vol.** : 10  $\mu$ L  
**Sample** : Aldehydes

### Analyte:

1. Formaldehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
2. Acetaldehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
3. Acetone [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
4. Acrolein [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
5. Propionaldehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
6. Crotonaldehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
7. Methyl ethyl ketone [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
8. Methacrolein [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
9. n-Butyraldehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
10. Benzaldehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
11. n-Valeraldehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
12. m-Tolualdehyde [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)
13. Hexanal [Deriv.]	(150 mg/L in CH <sub>3</sub> CN)

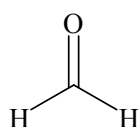
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Inertsil® Applications

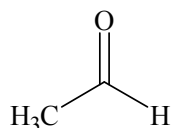
## Analysis of 13 kinds of Aldehydes (Ditected by Pre-Column Method with DNPH)

Data No. LA595-0696

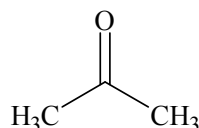
### Chemical Structure



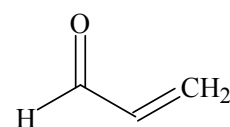
1. Formaldehyde



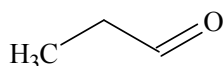
2. Acetaldehyde



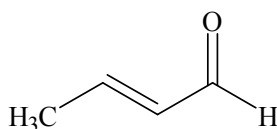
3. Acetone



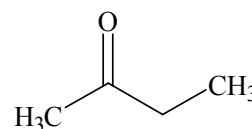
4. Acrolein



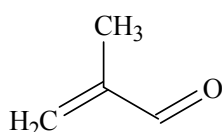
5. Propionaldehyde



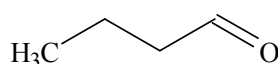
6. Crotonaldehyde



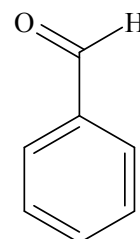
7. Methyl ethyl ketone



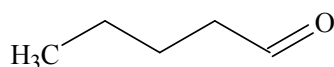
8. Methacrolein



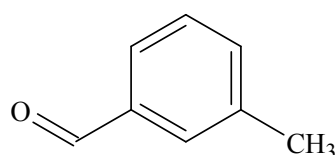
9. n-Butyraldehyde



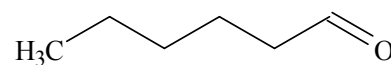
10. Benzaldehyde



11. n-Valeraldehyde



12. m-Tolualdehyde



13. Hexanal

Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.