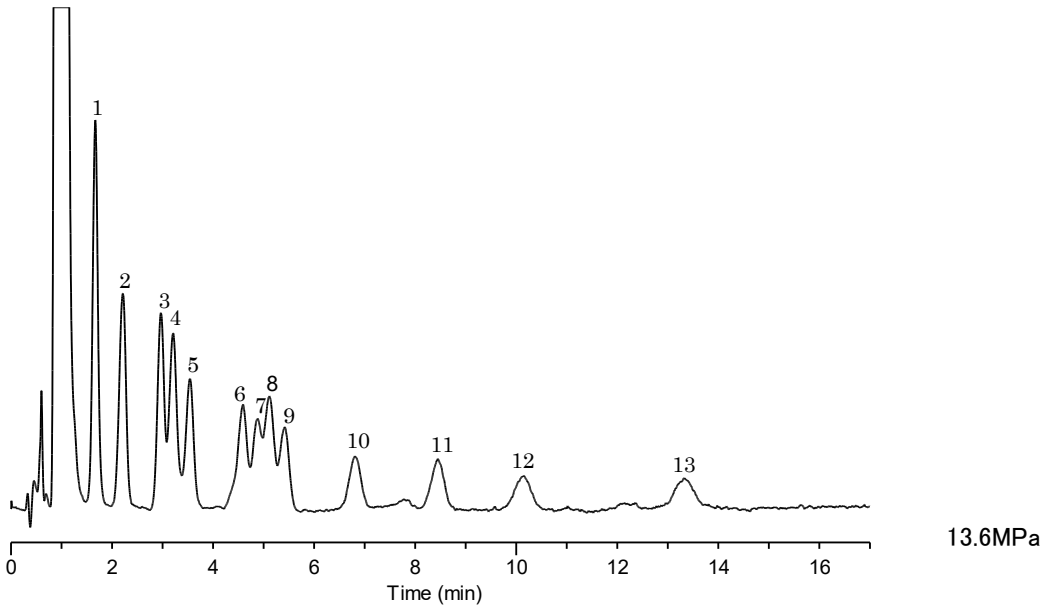
# Analysis of 13 kinds of Aldehydes (Detected by Pre-Column Method with DNPH)




## Conditions

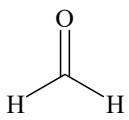
**System** : GL-7400 HPLC system
**Column** : Inertsil ODS-SP (3 µm, 75 x 3.0 mm I.D)
**Column Cat. No.** : 5020-02823
**Eluent** : A) $CH_3CN$
B) $H_2O$
C) THF
A/BC = 33/55/10, v/v/v
**Flow Rate** : 1.0 mL/min
**Col. Temp.** : 40 °C
**Detection** : UV 360 nm (GL-7450 UV Detector)
**Injection Vol.** : 10 µL
**Sample** : Aldehydes

**Analyte:**

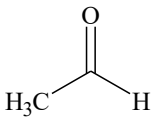
| | |
|---|---|
| 1.Formaldehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 2.Acetaldehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 3.Acetone [Deriv.] | (150 mg/L in $CH_3CN$) |
| 4.Acrolein [Deriv.] | (150 mg/L in $CH_3CN$) |
| 5.Propionaldehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 6.Crotonaldehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 7.Methylethylketone [Deriv.] | (150 mg/L in $CH_3CN$) |
| 8.Methacrolein [Deriv.] | (150 mg/L in $CH_3CN$) |
| 9.n-Butyraldehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 10.Benzaldehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 11.n-Valeraldehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 12.m-Tolualdehyde [Deriv.] | (150 mg/L in $CH_3CN$) |
| 13.Hexanal [Deriv.] | (150 mg/L in $CH_3CN$) |

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

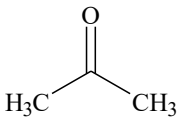
## Chemical Structure



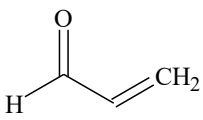
1.Formaldehyde



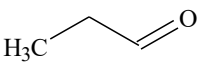
2.Acetaldehyde



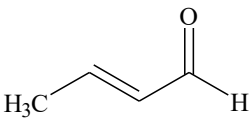
3.Acetone



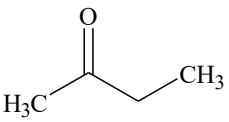
4.Acrolein



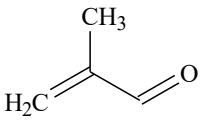
5.Propionaldehyde



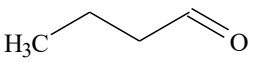
6.Crotonaldehyde



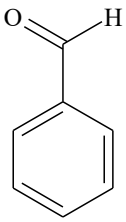
7. Methylethylketone



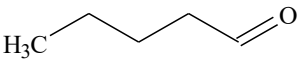
8. Methacrolein



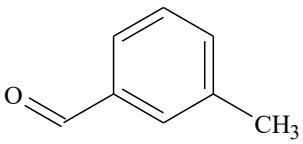
9. .n-Butyraldehyde



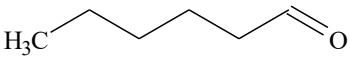
10.Benzaldehyde



11.n-Valeraldehyde



12.m-Tolualdehyd



13.Hexanal

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