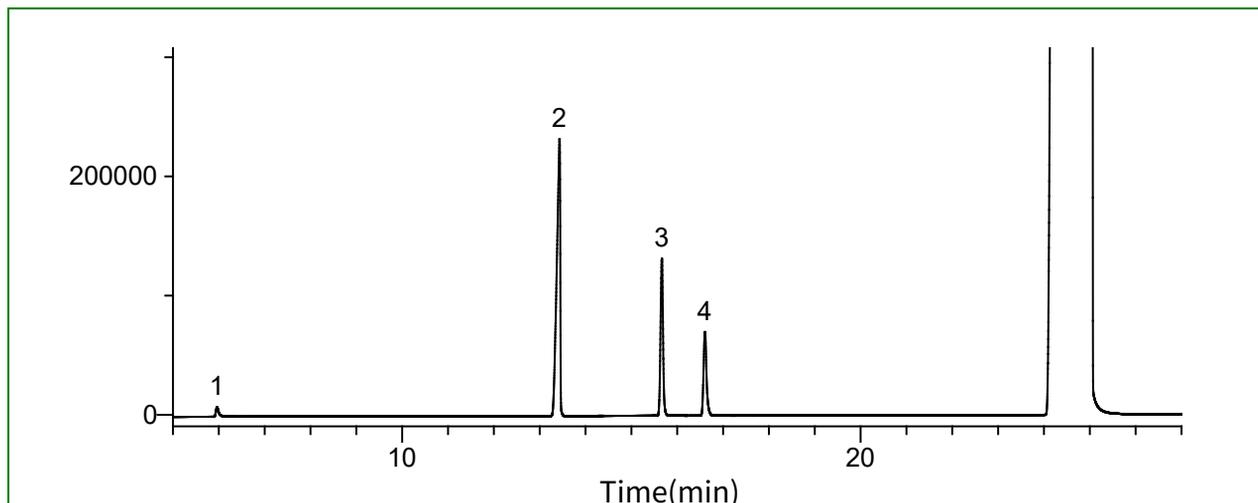


Purity Test of Benzyl Alcohol with Reference to the Japanese Pharmacopoeia

Benzyl alcohol is a colourless, clear, aromatic alcohol with a bactericidal effects.

In this application note, benzaldehyde and other related substances were diluted with benzyl alcohol and analyzed with reference to the purity test described in the Japanese Pharmacopoeia. The data shown here details the successful results.

Example: Measurement of standard



Conditions

System : GC - FID
Column : InertCap Pure-WAX
 0.32 mm I.D. x 30m df = 0.50 μ m
Col. Temp. : 50 °C - 5 °C/min - 220 °C (35 min hold)
Carrier Gas : He 60 kPa
Injection : Splitless 1 min Vent flow 50 mL/min
 200 °C
Detection : FID Range 10⁴
 310 °C
Sample Size : Analytes in Benzyl alcohol 0.1 μ L

Analyte :

| | |
|------------------------|-----------|
| 1. Ethylbenzene | 0.1 mg/mL |
| 2. Bicyclohexyl | 3.0 mg/mL |
| 3. Benzaldehyde | 1.5 mg/mL |
| 4. Cyclohexanemethanol | 1.0 mg/mL |

*The resolution between Benzaldehyde and Cyclohexylmethanol is 16.2.

Repeatability $n=6$

| | Ethylbenzene | Bicyclohexyl | Benzaldehyde | Cyclohexylmethanol |
|---------|--------------|--------------|--------------|--------------------|
| Ave. | 35673 | 1158092 | 483944 | 301732 |
| SD | 559 | 13782 | 4901 | 3877 |
| RSD (%) | 1.6 | 1.2 | 1.0 | 1.3 |

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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