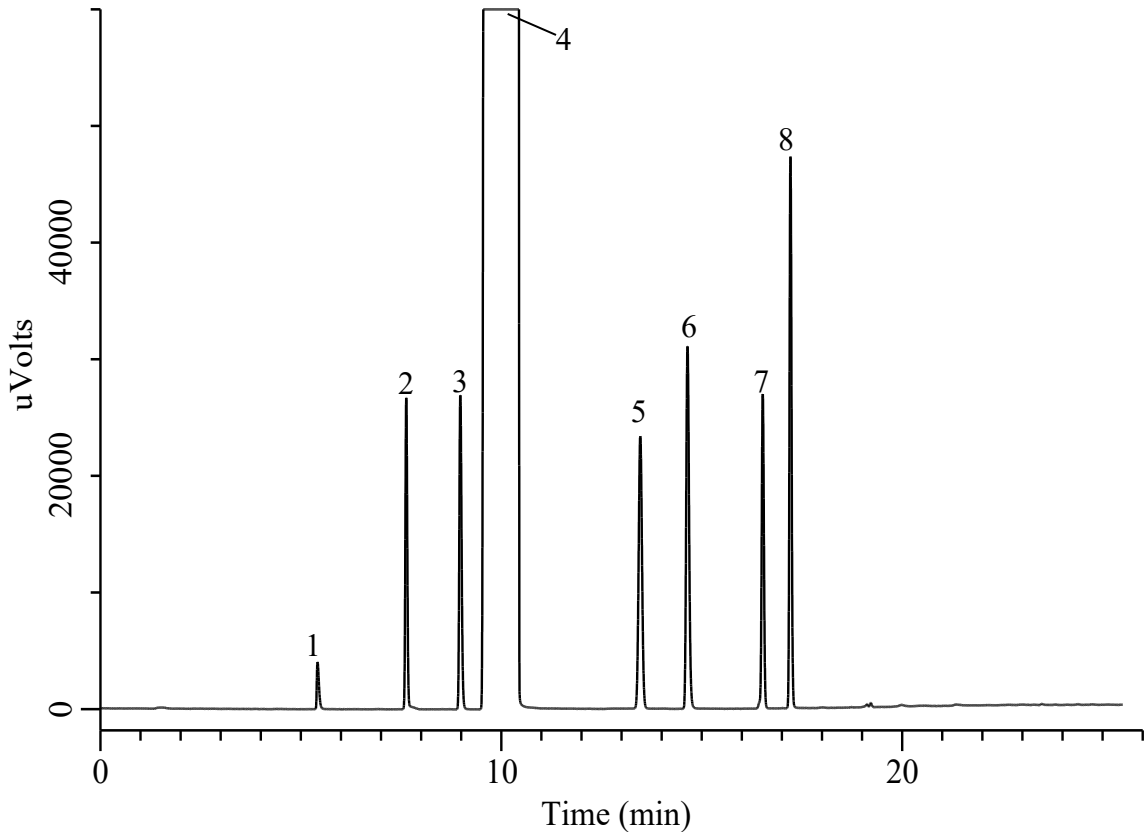


Analysis of Isopropyl Alcohol

(Under the Condition of USP-NF, Isopropyl Alcohol)



Conditions

System : GC-4000 Plus/FID
Column : InertCap 624 Select (GL Sciences Inc.)
 0.25 mm I.D. x 60 m df = 1.4 μ m
Col. Cat. No. : 1010-14686
Col. Temp. : 35 °C (5 min) - 1 °C/min - 45 °C
 - 10 °C/min - 100 °C (5 min)
Carrier Gas : He 2.3 mL/min , Constant Flow
Injection : Split 115 mL/min
 150 °C
Detection : FID Auto Range
 200 °C
Injection Vol. : 1 μ L
Sample : Standard

Analyte

1. Methanol	0.02 % (v/v)
2. Ethyl ether	0.1 % (v/v)
3. Acetone	0.1 % (v/v)
4. Isopropyl alcohol	Solvent
5. Diisopropyl ether	0.1 % (v/v)
6. 1-Propanol	0.1 % (v/v)
7. Ethyl acetate	0.1 % (v/v)
8. 2-Butanol	0.1 % (v/v)

Relative retention times

Methanol	: 0.5 (RT=5.437)
Ethyl ether	: 0.7 (RT=7.650)
Acetone	: 0.9 (RT=9.002)
Isopropyl alcohol	: 1.0 (RT=10.430)
Diisopropyl ether	: 1.3 (RT=13.492)
1-Propanol	: 1.4 (RT=14.673)
Ethyl acetate	: 1.6 (RT=16.540)
2-Butanol	: 1.7 (RT=17.228)

Resolution(3,4)	: 2.89 (\geq 1.5)
Tailing factor of 4	: 0.52 (\leq 2.0)
RSD of the Peak area of 4%(n=6)	: 0.49 (\leq 2.0)
Signal-to-noise ratio of 1	: 150.3 (\geq 10)