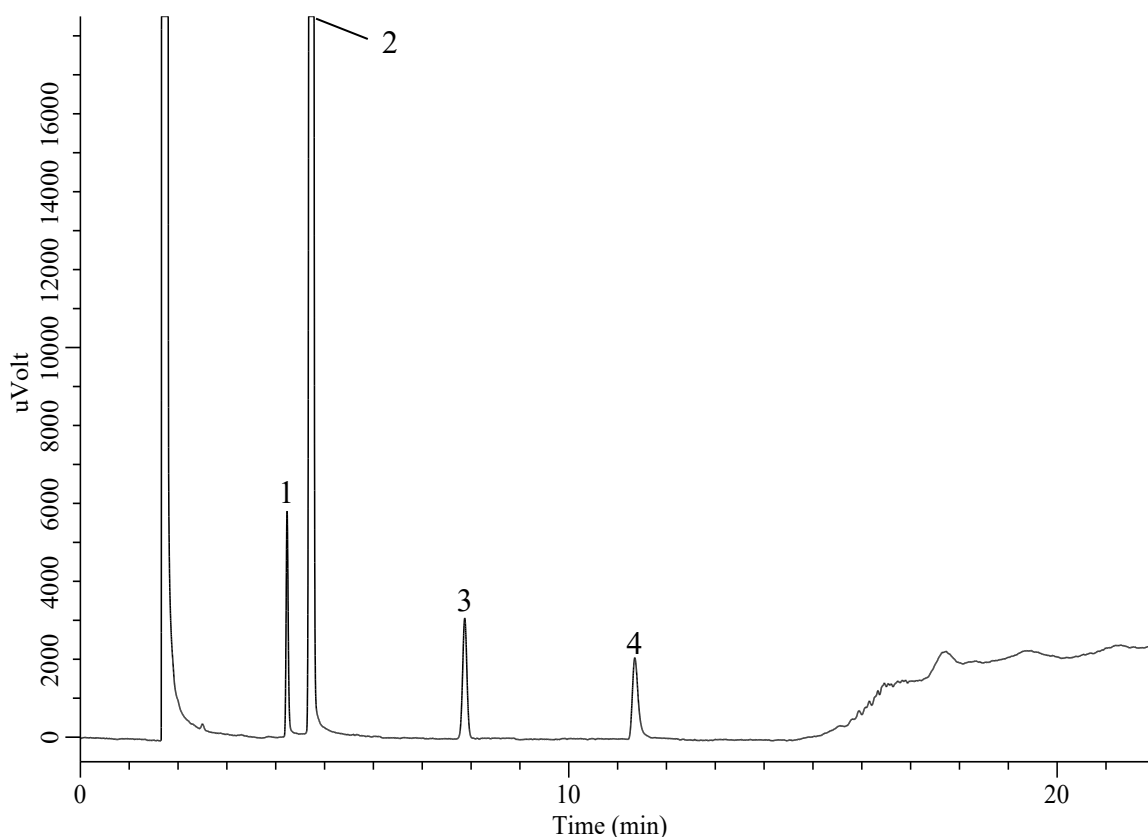


Analysis of Propylene Glycol

(Under the Condition of USP-NF, Propylene Glycol, Limit of Diethylene Glycol and Ethylene Glycol)



Conditions

System : GC-4000 Plus system
Column : InertCap 624 Select (GL Sciences Inc.)
 0.53 mm I.D. x 30 m df = 3.0 μ m
Col. Cat. No. : 1010-14988
Col. Temp. : 100 °C (4 min) - 50 °C/min - 120 °C (10 min)
 - 50 °C/min - 220 °C (6 min)
Carrier Gas : He 4.5 mL/min , Constant Flow
Injection : Split 45 mL/min
 220 °C
Detection : FID Auto Range
 250 °C
Injection Vol. : 1 μ L
Sample : Standard

Analyte

1. Ethylene glycol	0.05 mg/mL
2. Propylene glycol	2 mg/mL
3. 2,2,2-Trichloroethanol (I.S.)	0.1 mg/mL
4. Diethylene glycol	0.05 mg/mL

Sol. in Methanol

Relative retention times

Ethylene Glycol	: 0.9 (RT=4.232)
Propylene Glycol	: 1.0 (RT=4.733)
2,2,2-Trichloroethanol (I.S.)	: 1.7 (RT=7.869)
Diethylene Glycol	: 2.4 (RT=11.354)

Resolution(1,2) : 5.8 (≥ 5)