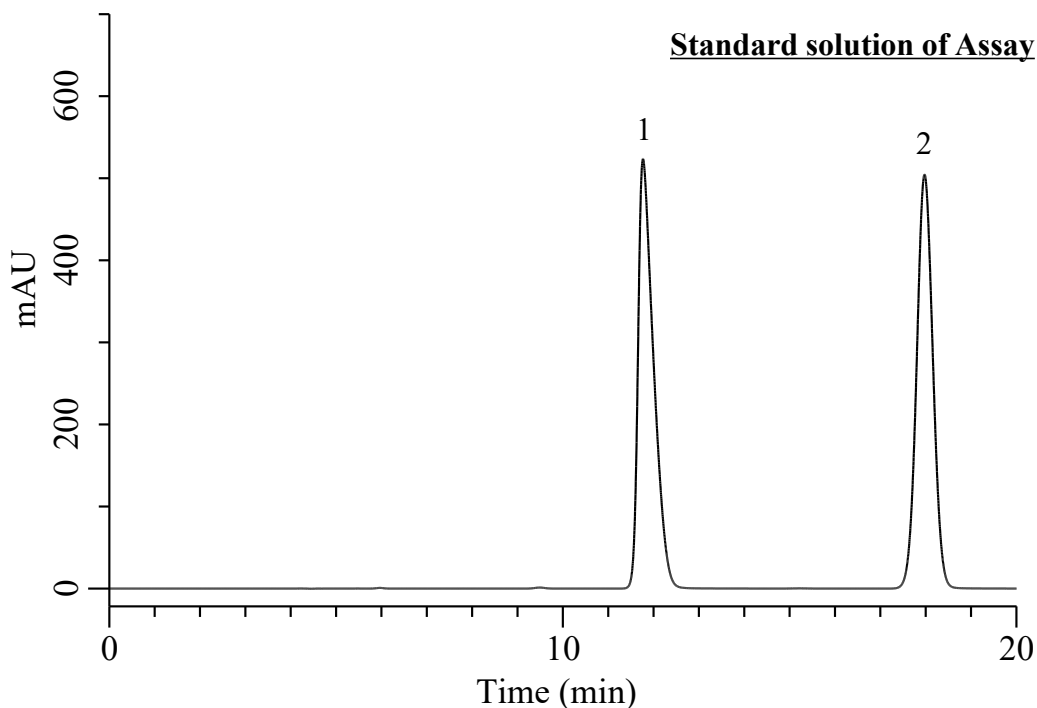


Analysis of Thiamine Hydrochloride

(Under the Condition of USP43-NF38, Thiamine Hydrochloride)



Conditions

System : Chromaster HPLC system (HITACHI)
Column : Inertsil WP300 C18 (GL Sciences Inc.)
 (10 μ m, 300 x 4.0 mm I.D.)
Column Cat. No. : 5020-
Eluent : A) CH₃CN/CH₃OH = 40/60, v/v
 B) Buffer*
 A/B = 40/60, v/v
Flow Rate : 0.68 mL/min
Col. Temp. : 40 °C
Detection : UV 254 nm
Injection Vol. : 10 μ L
Sample : Standard

Analyte:

1. Thiamine Hydrochloride	0.4 mg/mL
2. Methyl benzoate	0.4 mg/mL
Resolution (1,2)	: 9.6 (\geq 4.0)
Tailing factor (1)	: 1.72 (\leq 2.0)
Number of theoretical plates (1)	: 5,431 (\geq 1,500)
RSD of the peak ratio of 1 to 2 (%)(n=6)	: 0.17 (\leq 2.0)

*:5 mM sodium 1-octanesulfonate in dilute glacial acetic acid (1 in 100)