

IC Application Note No. U-35

Title: Chromatographic purity determination of Thiamine hydrochloride according to USP

Summary: Determination of Thiamine hydrochloride according to USP 28-NF 23 (second supplement) using RP chromatography with UV detection.

Sample: Thiamine hydrochloride

Sample Preparation: Tablets dissolved according to USP procedure

Column: 6.1008.100 Prontosil 120-5-C18 AQ 150

Wavelength: 254 nm

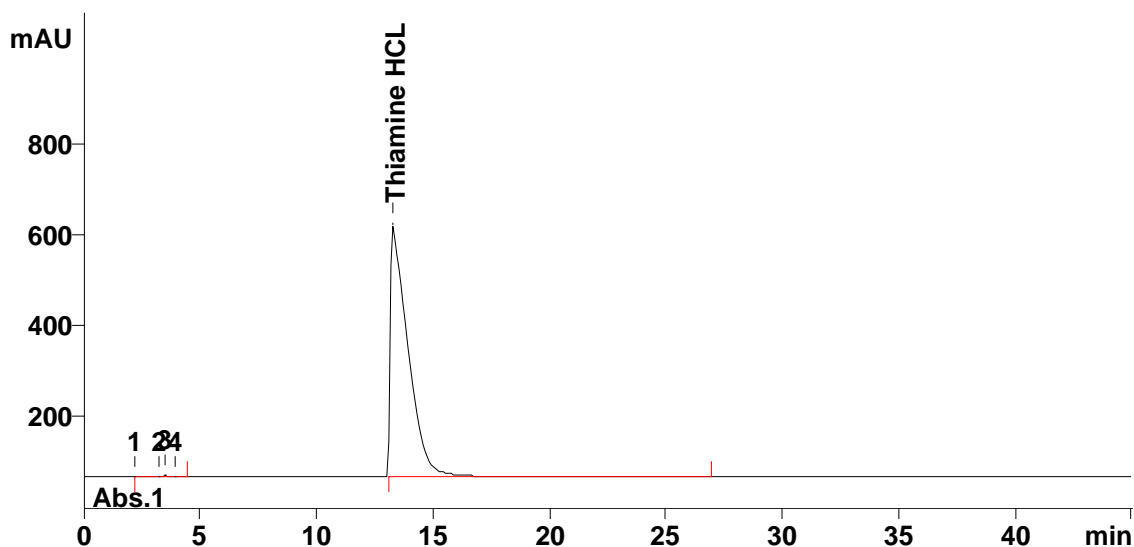
Solution A: 5 mmol/L sodium 1-octanesulfonate in diluted glacial acetic acid (1:100)

Solution B: Methanol / acetonitrile (3:2)

Eluent: Solution A / solution B (60:40)

Flow: 0.75 mL/min

Injection Volume: 10 μ L



Chromatogram:	Thiamine HCl area%
	99.8

Results:

Test factors	Value	Limit	Result
Response of Thiamine HCl	99.77 %	More than 99.0%	PASS