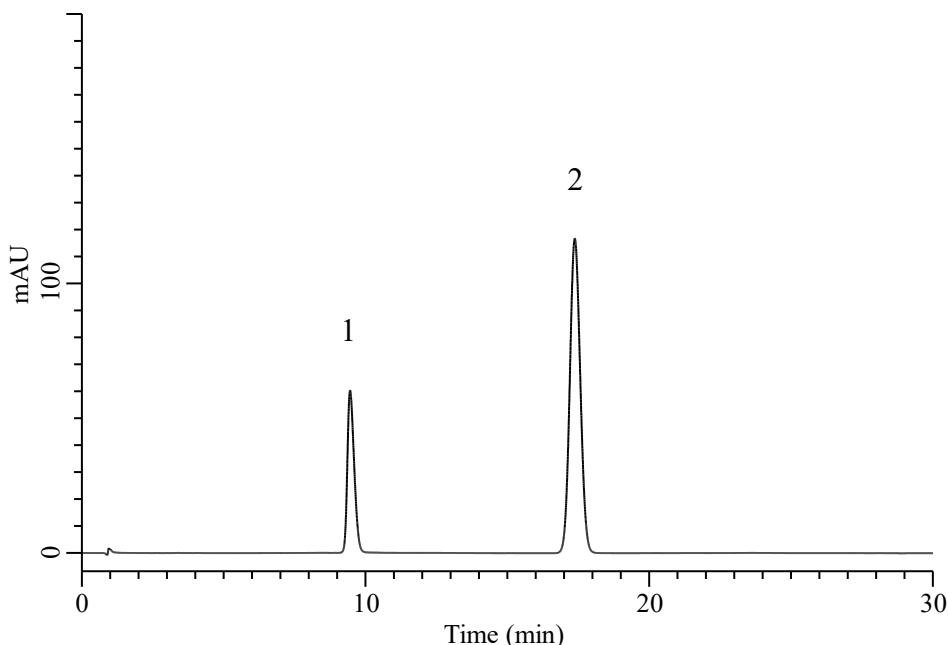


Analysis of Calcium pantothenate

(Under the Condition of USP41-NF36, Oil- and Water-Soluble Vitamins Capsules
CALCIUM PANTOTHENATE_Method 1)



Conditions

System	: Primaide (HITACHI)
Column	: InertSustainSwift C18 (GL Sciences Inc.) (5 µm, 150 x 3.9 mm I.D.)
Column Cat. No.	: 5020-90560
Eluent	: A) H ₃ PO ₄ B) H ₂ O A/B = 1/1000, v/v
Flow Rate	: 1.5 mL/min
Col. Temp.	: 30 °C
Detection	: UV 210 nm (Primaide 1410 UV)
Injection Vol.	: 10 µL
Sample	: Standard in Internal standard Solution*

Analyte:

1. Calcium pantothenate	0.6 mg/mL
2. <i>p</i> -Hydroxybenzoic acid	0.08 mg/mL

Relative retention time

Calcium pantothenate : 0.54
p-Hydroxybenzoic acid: 1.00

RSD of the

peak area of 1 (%)(n=5) : 0.24 (≤ 3.0)
peak area of 2 (%)(n=5) : 0.13 (≤ 3.0)

*: 80 mg of *p*-hydroxybenzoic acid in 3 mL of ethanol(99.5). Add 50 mL of water and 7.1 g of dibasic sodium phosphate, and dilute with water to 1000 mL. Adjust with phosphoric acid to a pH of 6.7.