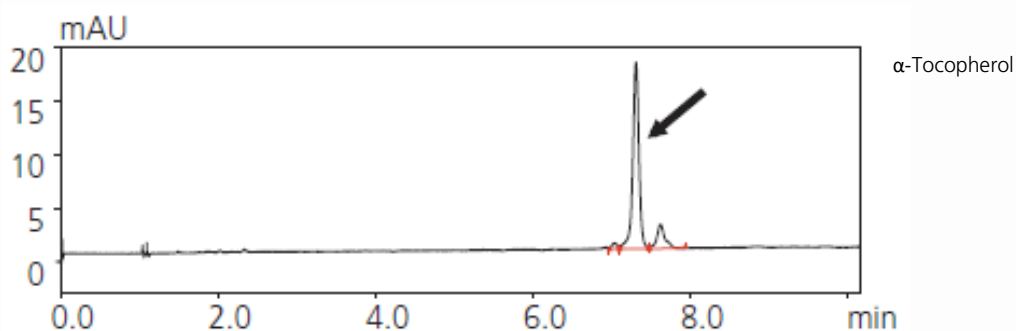


CoreFocus
Report
No.109

SFC Shim-pack Series

Shim-pack™ VP-ODS and Shim-pack UC-Choles
Analysis of Vitamin E in a Commercial
Supplement by Offline SFE-SFC-PDA

Keywords: fat-soluble vitamins, antioxidant



Offline SFE:

System : Nexera™ UC SFE
Extraction vessel : 5 mL
Extraction solvent : CO₂
Temperature : 40 °C
Back pressure : 15 MPa
Extraction time : 15 min
(Static 2 min -> Dynamic 3 min) x 3 times

Trap & Pressure down condition

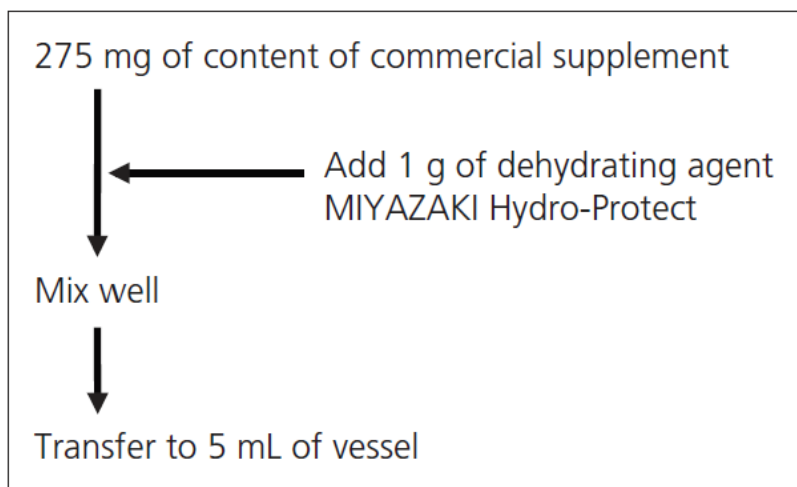
Trap column : Shim-pack VP-ODS (50 mm L. x 4.6 mm I.D., 5 μ m), P/N : 228-36849-91
Temperature down time : 10 min (15 - 25 min)

Recovery conditions

Elution solvent : *n*-hexane
Flowrate : 2 mL/min
Temperature : 60 °C
Fraction time : 3.5 min (25 - 28.5 min)

SFC Condition

Column : Shim-pack UC-Choles (250 mm L. x 4.6 mm I.D., 5 μ m), P/N : 227-32603-02
Flowrate : 3 mL/min
Modifier : 2 - propanol
Gradient : 2 % (0 min) - 20 % (10 min) - 50 % (10 - 12-min)
Temperature : 40 °C
Back pressure : 15 MPa
Injection volume : 2 μ L



Preliminary Pretreatment for Supplement Sample before SFE

Source : Application News L501 ([JP](#), [ENG](#))

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