

Phenolics in Echinacea

HPLC Method

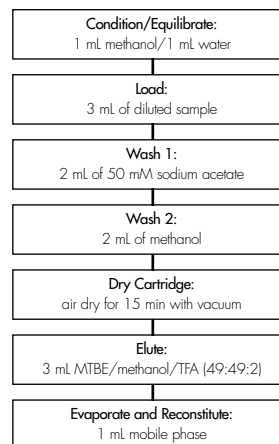
Column: Symmetry® C₁₈, 4.6 x 250 mm, 5 µm
Part number: WAT054275
Mobile Phase A: 0.1% phosphoric acid
Mobile Phase B: Acetonitrile
Gradient:

Time (min)	%A	%B
0	90	10
13	78	22
40	60	40

Flow Rate: 1.5 mL/min
Injection volume: 10 µL
Temperature: 35° C
Detection: UV @ 330 nm

Oasis® MAX method for phenolics in echinacea

Conditions for Oasis® MAX Cartridge, 3 cc, 60 mg
 Part Number 186000367



Herbal tea extract before SPE cleanup



Herbal tea extract after SPE cleanup using Oasis® MAX

Sample pre-preparation

100 mg sample is extracted with 25 mL of ethanol:water (70:30)
 1 mL of the ethanolic extract is diluted 1:3 with water (~ pH 7)

- Recovery, measured with certified standards at 100 ppm in reagent water, was greater than 85 % for all compounds
- All analyses gave results within ± 35 % of the expected values with the exception of the liquid supplement (see goldenseal analysis)
- The selective SPE extraction and cleanup procedure provided a convenient analysis of echinacea phenolics in complex matrix such as in herbal tea

