

Food and Beverages

HPLC Analysis of Acrylamide in Fried Potato Chips on Discovery® HS F5 after SPE using Discovery® DSC-MCAX and DSC-18

sample preparation SPE (Solid Phase Extraction)
 sample/matrix . . . Finely grind 2.0 g of potato chips, place in 20 mL vial and add 10 mL water. Mix using vortex until mixture forms a thick paste. (Place sample in centrifuge tubes and centrifuge at 16.1 rcf for 5 min. Extract aqueous portion of sample leaving oil layer and solids.)
 SPE tube/cartridge Discovery DSC-MCAX, 300 mg/3 mL (52784-U)
 SPE tube/cartridge Discovery DSC-18, 1g/6mL (52606-U)
 condition . . . connect a Discovery DSC-MCAX SPE tube to the top of a Discovery DSC-18 SPE tube using an SPE tube adapter, pass 1 mL methanol, then 1 mL DI water through both SPE tubes until the tubes are dry
 sample addition 1 mL of aqueous extract
 washing 1 mL DI water
 elution removing upper MCAX SPE tube, pass 2 mL methanol through lower DSC-18 SPE tube
 elute post-treatment evaporate to dryness with nitrogen at 30 °C, reconstitute in 0.5 mL DI water
 column Discovery HS F5, 15 cm x 4.6 mm I.D., 3 µm particles (567507-U)
 mobile phase 100% ultra-pure water
 column temp. 35 °C
 detector ESI+
 injection 5 µL
 Application No. G003759

