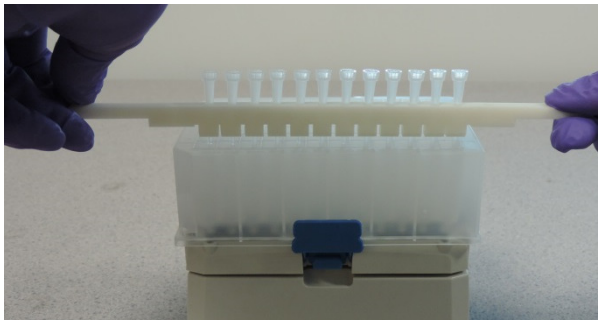
Solid Phase Microextraction

All Inclusive SPE-it™ Kit

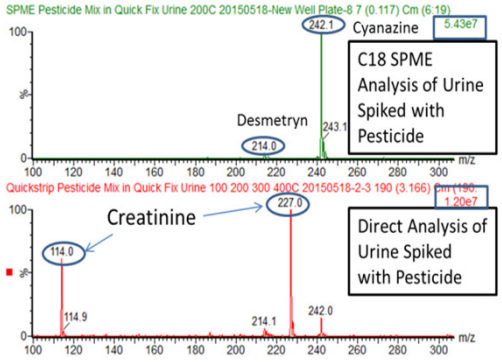


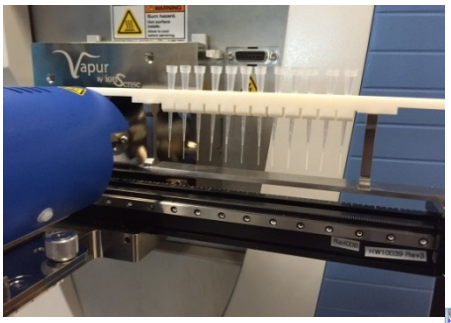
- Multiple sorbent coatings available in the forms of C18 and PDMS/DVB.
- 10 mm of exposed fiber to expose to your sample matrix.
- SPME fibers extract targeted analytes concentrating them while leaving behind salts and ionization inhibiting molecules.
- Analyte can subsequently be extracted from the fiber for confirmation by LC/MS.
- The DART can be equipped with automation for rapid analysis of screening large numbers of samples.
- The DART SPME kit comes with the following:
    - 5 96 well plates
    - 96 SPME fiber (C18 or PDMS/DVB)
    - Deep Well Plate shaker
    - 2 SPME holders (Holds 12 fibers) and module
    - 1 SPME Kit Place Mat

Optimized sample preparation for DART®-MS : A novel Solid Phase Microextraction (SPME) separation technique for reducing biological matrix effects for improved ionization!

Pesticides in Urine:

Biological samples contain molecules that that inhibit the ionization of molecules present in the sample. The spectra to the right shows value of using SPME to detect pesticides (top) in urine by eliminating Creatinine.

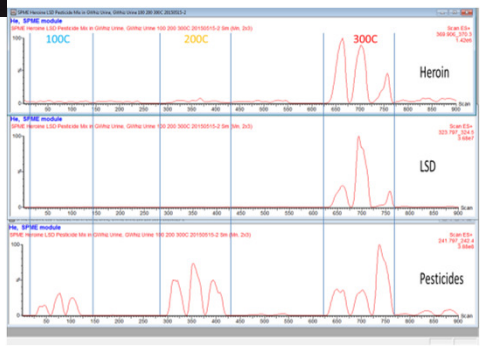


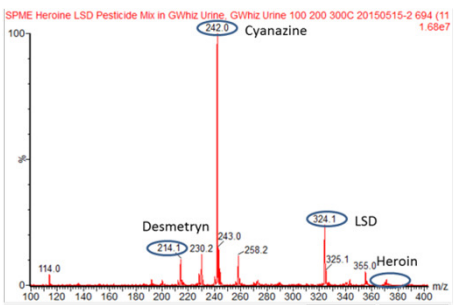


Temperature Profile:

Temperature optimization can be conducted on a single fiber for mixtures. The image to the left shows the conceptual representation of how the fiber is being analyzed one-by-one.

Extracted ion chromatograms are a great tool for assessing the best DART gas temperature for a given sample. The spectra to the right shows the results from a three temperature thermal profile. The sample was a mixture of drugs and pesticides in urine.





Although the pesticides were showed promising response at 200 °C the spectra to the right shows the results of the 300 °C analysis. All three analytes of interest are present in the spectra. For targeted analysis of an individual compound they should be analyzed at the optimal temperature.

Rev 1