SFL2

Method: DART-SCRN-OrbiTrapMS

Separation of Controlled and Non-controlled Substances by Mass Spectrometry DART

Scope: General purpose

Sample Preparation:

Samples can be analyzed directly as powders or as solutions in a suitable solvent.

Method Parameters:

Instrument: ThermoFisher Scientific Exactive Plus HRAM DART-MS
Mass Analyzer: Orbitrap
Ionization Mode: DART
Drying Gas: Nitrogen
Ionization gas: Nitrogen
Capillary Temperature: 250°C
MS Scan Range: 50-750
MS Scan Rate: 7.2 scans/second
Collision Gas: Nitrogen
Collision Energy: 1V, 30V, 60V
Tune File: Exactive Plus calibration
Reference Masses: 195.087, 524.264, 1221.990, 1421.977, 1621.965
Activation Type: SID

Limitations: See individual instrument validation reports.

Acceptance Criteria (unless otherwise noted in individual validation report):

Selectivity and Accuracy: Analyte spectra are compared to a verified reference database, commercial library, published literature spectra or spectra from another ISO/IEC 17025 accredited laboratory. The measured monoisotopic pseudomolecular $(M+H)^+$ weight corresponds to the theoretical molecular weight of the substance. The measured m/z values for prominent ions in the sample spectrum were all within 5 ppm as those in the reference spectrum. No prominent unexplainable extraneous ions are observed in the sample spectrum.